CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, February 9, 1911.

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RAILWAYS.

(*Denotes that this work is advertised in Engineering News.)

BALTIMORE & OHIO R. R. CO.—We are officially advised that the contract for the line to be built by the Buckhannon & Northern R. R., between Riversville, W. Va., and Pt. Marion, Pa., has been awarded to PATTERSON, MORAN & LUCK, Fitzsimons Bldg., Pittsburg, Pa. Noted Feb. 2.

CANADIAN NORTHERN RY.—Contract for the construction of a line for this company on Vancouver Island, B. C., has been let to MICHAEL CARLIN & CO., Ottawa, Ont. Contract price, $525,000. This company has also awarded a provisional contract to the NORTHERN CONSTRUCTION CO. for a 20-mile section from Popkum eastward to Hope, B. C. The contract for a line of 35 miles, between Hope and Boston Bar, will soon be awarded. Bids for a line between Yale and Kamloops, B. C., which includes several tunnels through rock, will shortly be received.

FLORIDA EAST COAST RY.—The contract for the construction of 125 miles of railroad for this company for a line from Maytown, Volusia County, Fla., to Lake Okechobee, has been awarded to WRIGHT & WADLEY CO., at $5,500,000.

GREAT NORTHERN RY.—J. J. Hill has stated, according to press reports, that construction work is to be started at once on the Midland of Manitoba, building a line from Winnipeg, Man., to join the Hill lines in North Dakota. The plans include the construction of a line from Winnipeg, south to the international boundary, with a branch from Winnipeg, west by the way of Brandon and Elkhorn; also a branch from Morden, northwest to a point near Rathwell, thence northwest to a point on the first-mentioned line running westerly from Winnipeg. A. H. Hogeland, St. Paul, Minn., is Ch. Engr.

GREENVILLE & KNOXVILLE R. R.—A 25-mile extension is planned from the present terminal, Riverview, S. C., to Knoxville, Tenn. The company has recently recorded a mortgage as security for bonds to the extent of $6,000,000, which funds will be used for the extension. R. G. Chestnut, Greenville, S. C., is Supt.

HAMPDEN R. R.—The Chicopee, Mass., authorities will grant the Hampden R. R. the right to build as follows: Beginning on the present location of the Chicopee Falls branch of the Boston & Maine, easterly from Grape St., in Chicopee Center, thence by a bridge across the Ames Sword Co. pond to the north side of the river; thence easterly, northeasterly and easterly to a point in Grattan St., crossing about 21 ft. under this street; thence crossing Montgomery St., at about 37 ft. below grade; continuing and crossing Sheridan St., about 12 ft. above present grade and continuing on easterly to the Chicopee line. Ralph D. Gillett is Pres. Noted Oct. 6.

LA CROSSE & SOUTHEASTERN RY.—Surveys are being made under the direction of A. E. Rau, Sparta, Wis., for a 35-mile extension from Viroqua to Retreat, Wis. W. S. Cargill, La Crosse, Wis., is Pres.

MAINE.—A bill has been introduced in the Legislature which, if it becomes a law, will open up the way for the Canadian Pacific Ry. to secure a direct route from Quebec to St. John, N. B., nearly 100 miles shorter than the present route. The bill gives the Aroostook Valley R. R. a Maine electric road, controlled by the Canadian Pacific, authority to purchase the Canadian Pacific branch running from Aroostook Junction to Presque Isle. Authority is also given the road to build westward from Washburn, its present terminus of the Aroostook Valley, to the Canadian boundary. It is the plan for the Canadian Pacific to obtain a Canadian charter and build from Quebec to connect with the Western end of the new Aroostook road.

MAINE.—A new railway is proposed between Bangor and Houlton, Me. Surveys have been made for a line 108 miles long, compared with 141 miles, the length of the present line. The new line is to run largely through a virgin country, and will really terminate at Brewer, across the river from Bangor. For 25 miles the cuts and fills are heavy, but the remainder of the location is easy. A. L. Lumbert, of Houlton, Me., is Attorney for the company.

MANITOBA.—Announcement is made that James J. Hill will start work next month on the line southward from Winnipeg to connect with the Great Northern Ry. James Fisher, K. C., Winnipeg, is local representative.

NEW YORK CENTRAL & HUDSON RIVER R. R.—The company has procured necessary additional width in its right-of-way to enable it to double track its line between Niagara Falls and Rochester. Geo. W. Kittredge, Grand Central Station, New York, is Ch. Engr.

OKLAHOMA.—The Kansas, Oklahoma & Panama has amended its charter. It is proposed to build a line from Beaver, Okla., southeast to Frederick, near the Red River, thence into Texas, with a branch from Elk City, Okla., east to Oklahoma City, in all, about 325 miles. The estimated cost of construction is $30,000 a mile. The company is capitalized at $1,000,000, with offices at Oklahoma City, Okla. The directors include: J. J. Winton, R. M. Ruffin, F. A. Mosher, A. H. Syncox and J. E. Dumarr.

ONTARIO.—The Quebec & Great Northwestern R. R. Co. is seeking a charter to build a number of lines in the vicinity of New Liskeard, Ont.

PENNSYLVANIA R. R.—This company is seeking permission to change the grade of certain streets and close others in Rahway, N. J., preparatory to eliminating grade crossings. Alexander C. Shand, Philadelphia, Pa., is Ch. Engr.

PHILADELPHIA, PA.—Among Mayor Reyburn's plans for the improvement of Philadelphia is a four-track subway the entire length of Broad St., eleven miles. The extension of the Market St. Subway system of the Philadelphia Rapid Transit Co., to Camden, N. J., through tunnels under the Delaware River. All the projected improvements, it is said, are to be made under a $60,000,000 city loan, of which $28,000,000 will be spent on the Broad St. subway. The proposed subway under Broad St. is to be controlled by the city, but if built probably will be leased to the Union Traction Co., a subsidiary concern of the Philadelphia Rapid Transit Co., which controls all the street car lines of Philadelphia.

QUEBEC.—The New Ontario & Quebec Ry. Co. will apply to Parliament for a charter to build from the Northern Transcontinental R. R., in the Province of Quebec, around the east end of Upper Lake Abitibi to Thistle Township, Ont., a distance of 95 miles, thence southwesterly to a junction with the James Bay Ry., near Congdon Station. Also from Iroquois Falls on the Temiskaming & Northern Ontario Ry., to a junction with the National Transcontinental, a distance of 25 miles.

SASKATCHEWAN.—A charter is being sought by the Shaw Lumber & Ry. Co., through Thomas Shaw, Attorney, Regina, Sask., to construct a line of railway of standard gage 75 miles in length. Construction will be commenced as soon as the charter is issued.

SASKATCHEWAN.—The High River, Saskatchewan & Hudson Bay Ry. Co. has applied for a charter to build a line to Saskatoon, and on northeasterly to the Pass, which is the westerly terminus of the proposed Hudson Bay Ry.

SOUTH DAKOTA.—A line is contemplated by the St. Paul, Sioux City & South Dakota from Canova, through Clance and Madison to Marshall, Minn. C. A. McGee, Winfred, S. Dak., is interested.

SOUTHERN RY.—The construction of a second track south of Franklyn Junction has been authorized. W. H. Wells, Washington, D. C., is Ch. Engr.

UTAH.—The Utah & Grand Canyon R. R. has been incorporated to build two lines in this State, one from Lund, Utah, south to St. George, 85 miles, and from Marysvale, south, up the Sevier River, to Panquite, 55 miles. F. A. Dudley, Niagara Falls, N. Y., is Pres.

ELECTRIC RAILWAYS.

BOSTON, MASS.—The Boston Elevated R. R. plans to lay a double track from Fargo St., South Boston, along Sumner St., connecting the South Station with city points. About two miles of track will be laid. A. L. Plympton, Boston, is Ch. Engr., Surface Lines.

TERRYVILLE, CONN.—The Bristol & Plainville Tramway Co. has applied for power to extend its lines on Agency Ave., and South Main St. Miles Lewis Peck, Riverside, Bristol, Conn., is Pres.

WILLIMANTIC, CONN.—C. W. Comstock, L. T. Storrs and A. W. Buchanan are the incorporators of the Willimantic & Stamford St. Ry. Co., now applying for a charter to build a line connecting Stafford Springs, Mansfield, Spring Hill, Mansfield Center and Willimantic.

BUFFALO, N. Y.—Application will be made at the next session of the Ontario Parliament for an act incorporating the Niagara Frontier Ry. to construct an electric railway from Fort Erie, Ont., through Niagara Falls, Ont., to the town of Niagara.

PASSAIC, N. J.—Since the two-fare arrangement on the White Line trolley road, between Passaic and Rutherford, went into effect, there has been considerable talk of the formation of a new trolley company. John T. Harrop, a contractor, of Garfield, is at the head of the movement. It is said that $75,000 has already been pledged to build the road, but before franchises are applied for, it is proposed to raise the full amount necessary.

ALBANY, GA.—An application for a franchise has been made by local residents, to build a street railway, it is reported.

SANFORD, FLA.—The Sanford Traction Co., it is reported, is planning to extend its line about 15 miles. S. O. Chase, Sanford, is Pres.

JOHNSON CITY, TENN.—The power to build a short line on Main St. to the Soldiers' Home, has been granted to the Johnson City Traction Co. Karl Thornburg, Johnson City, is Ch. Engr. Noted Dec. 8.

LEXINGTON, KY.—The Kentucky Securities Co., recently incorporated at Richmond, Va., has taken over the traction properties of the Lexington Interurban Rys. Co., and will spend $1,000,000 on improving the entire system in and about Lexington. A new power plant will be erected here. George MacLeod, this city, is Ch. Engr.

CONNEAUT, OHIO.—The Lake Erie & Youngstown R. R. Co., which will run to Conneaut and Youngstown, has been granted an extension of franchise by the Youngstown City Council. The franchise permits the railroad to operate cars over part of the right of way of the Mahoning Valley line within the limits of Youngstown. John H. Ruhlman, former Lieutenant Governor A. W. Jones, of Youngstown, and George J. Chapman and other residents of Conneaut, and others are promoters.

LANCASTER, OHIO.—Word has been received that a company is soon to be incorporated with an authorized capital of $100,000 for the construction of a traction line to connect Lancaster with Athens. Preliminary arrangements for the project are expected to be completed by April 1.

INDIANAPOLIS, IND.—An announcement comes from Indianapolis to the effect that $3,500,000 of the total of $4,805,000 which has been recently taken up by the Indianapolis & Cincinnati Traction Co., will be used for road extension.

PORTAGE, WIS.—The Chicago & Wisconsin Valley (Electric) R. R. Co. has awarded contracts for 1,000 tons of steel rails to the UNITED STATES STEEL CORPORATION, to be delivered this month, as follows: At Portage, 330 tons; at Madison, Wis., 670 tons. The contract for 20,000 ties has been awarded to the BROWN LAND & LUMBER CO., of Rhinelander, Wis.

ROCHESTER, MINN.—The Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Co. will add about 70 miles of line to its system, during the coming year, it is reported. The new line will connect Faribault, Owatonna, Dodge Center and Rochester, Minn. F. G. L. Hunt, International Bldg., Minneapolis, Minn., is Ch. Engr.

MAMMOTH SPRINGS, ARK.—Engineers have begun surveying the road of the proposed electric line from Mammoth Springs, Ark., to West Plains, Mo., about 30 miles. Power for the line will be generated at Mammoth Springs, and will be sold in Mammoth Springs, Thayer, Koshkonong, Brandsville and West Plains.

BOULDER, COLO.—It is reported that during the coming year a line connecting Boulder, Eldorado Springs and Crags, about eleven miles, will be built by the Crags & Canon Ry. Co. John R. Hartzell, 318 Chamber of Commerce Bldg., Denver, Colo., is Pres.

FORT LUPTON, COLO.—E. N. Reaser, promoter of the Denver & Greeley Interurban R. R. has written to A. W. Davis, of this city, from New York, stating that a deal for financing the system has been closed. Fort Lupton citizens subscribed to $100,000 of stock in the new line planned, to run from Denver to Fort Lupton, thence west to Estes Park by way of Longmont.

PORTALES, N. MEX.—A 50-mile electric line between Portales and Taiban, N. Mex., is to be built by the American Sugar Co. A total of 50,000 acres to be planted in sugar beets next year has already been contracted for, a factory will be built and the industry established on a large scale in Eastern New Mexico.

BURBANK, CAL.—Press reports state that the Pacific Electric Ry. Co. has secured a franchise to extend its line on Fourth St., this city. George E. Pillsbury, Sixth and Main Sts., Los Angeles, is Ch. Engr.

LA JOLLA, CAL.—It is reported a franchise has been granted the San Diego Electric Ry. Co., to extend from Oldtown to La Jolla. William Mair, Union Bldg., San Diego, Cal., is Ch. Engr.

LOS ANGELES, CAL.—Press advices state that a franchise has been granted to the Los Angeles-Pacific Ry., to build a line in the San Fernando Valley. E. C. Johnson, Sherman, Cal., is Ch. Engr.

MONTREAL, QUE.—An application for incorporation has been made by Aime Geoffrion and Victor Cusson, Atty's., of Montreal, for the Montreal & Northern Colonization Ry., capitalized at $10,000,000. The route map has not been announced.

BRANDON, MAN.—The Brandon Electric Ry. Co., through H. P. Blackwood, Att'y., Winnipeg, Man., is seeking a charter to build an electric street railway line in Brandon, Man.

WINNIPEG, MAN.—Application is being made by H. P. Blackwood, Winnipeg, Man., for a charter for the Winnipeg River Ry. Co., to build from Winnipeg, Man., to Lac du Bonnet, 65 miles, and with several branch lines.

WINNIPEG, MAN.—An application has been made by the Central Canada Ry. & Power Co., to build a standard gage railway from Winnipeg, Man., to a point on the Winnipeg River, 60 miles north of Winnipeg. The charter also provides for the development of electric energy. Fisher, Wilson, Battram & Hamilton, Winnipeg, Man., are the Attys.

REGINA, SASK.—During this year and next this city will spend approximately $450,000 on its municipal street railway system, half of this sum to be expended this year for 11½ miles of track.

LYTTLETON, B. C.—Martin Burrell is head of a syndicate seeking a charter for the British Columbia & Dawson Co., to build from Lyttleton, B. C., to Dawson City, Yukon, with branches to adjacent territory.

Proposed Work in Central New York.

While most of the work in connection with the construction of the Barge Canal already has been placed under contract, there still remains to be awarded, the coming year, work which is estimated to cost about $4,000,000. The preparation of plans and specifications for the remaining contracts is being rapidly completed by the Engineering Department. The contracts, plans for which are nearest completion, include the construction of an aqueduct and bridges at Medina; the construction of bridges over the Mohawk River at Canajoharie and over the Oswego Canal lock at Phoenix; and the construction of hydro-electric plants and equipments for operating and lighting various locks on the Erie Canal. Plans and specifications for the work of constructing a junction lock at Rome have already been completed and this contract will soon be advertised.

The preparation of plans and specifications for the work of improving the Cayuga and Seneca Canal under the $7,000,000 bond issue, approved by the people in 1909, is also going forward. Only two contracts have thus far been awarded for this work, and the remaining work is estimated at about $4,000,000.

The plans and specifications for the new $600,000 High School to be erected by the city of Albany are nearly completed, and it is the expectation that the work will be advertised within a few weeks.

In the line of industrial improvements, the Delaware & Hudson Co., has almost completed plans for the erection of an extensive repair plant in the southern part of the city of Watervliet. The work proposed is estimated at about $2,000,000. The new plant is designed to take the place of those now maintained by the company at Green Island, Whitehall, Plattsburg, Mechanicville and other points.

LIGHT AND POWER PLANTS.

(*Denotes that this work is advertised in Engineering News.)

BURLINGTON, VT.—An injunction has been granted restraining this city from expending an additional $27,000 on its municipal lighting plant.

BOSTON, MASS.—The contract with the RISING SUN LIGHTING CO., to light 12,000 street gas lamps at the rate of $23.60 per lamp per year, has been extended for six months. Specifications are being prepared for advertisement to cover the lighting for a number of years, and will probably appear by March 1. Louis K. Rourke is Comr. of Dept. of Public Works.

BROOKHAVEN, MASS.—Bids will be received by the Superv. Arch., Washington, D. C., until Mar. 8, for construction complete, including electric conduits and wiring, of the U. S. post-office building at Brookhaven, Mass.

*WESTFIELD, MASS.—Bids will be received until 2 p. m., Feb. 17, for furnishing and installing the wiring for the underground system of electric light and power wires. Plans may be seen and blank forms of proposals, contract and specifications obtained at the office of Oren E. Parks, Town Engr.

STRATFORD, CONN.—The citizens have voted to contract for 100 more lamps, in addition to the 50 authorized. An appropriation of $2,500 was made to pay for same.

ELMIRA, N. Y.—The Elmira Water, Light & R. R. Co. has been authorized by the Public Service Commission to issue $243,995 of bonds for extensions of service and improvements to plant.

LYONS, N. Y.—The Crowell-Sherman-Stalter Co. will construct an electrical power-house here.

NIAGARA FALLS, N. Y.—The Cliff Electrical Distributing Co. has been given authority by the Public Service Commission to issue $250,000 of bonds for improvements to plant.

PHOENIX MILLS, N. Y.—The County of Otsego will build and equip a power-house, 55 x 30 ft., here. Bids are being received. F. D. B. Ingalls, Rosenbloom Bldg., Syracuse, N. Y., is Engr.

CAMDEN, N. J.—Business men in the Kaighn Ave., Sycamore St., Broadway and Fourth St. section are planning to establish an independent electric light plant. It is believed the members of the Business Improvement Association are interested; also T. Edward Hollingshead.

MILLVILLE, N. J.—Charles T. Main, Boston, Mass., has been retained by the Millville Mfg. Co. to reconstruct their power plant. The contract for turbine and electrical equipment has been awarded to the ALLIS-CHALMERS CO., Milwaukee, Wis.

PITMAN GROVE, N. J.—The Gloucester County Electric Co. has received permission to erect a distributing system to supply electricity for lamps and motors here.

EBENSBURG, PA.—The installation of two new generators is contemplated by the Ebensburg Light, Heat & Power Co. E. F. Craver is Gen. Mgr.

MERCER, PA.—The contract for the installation of a plant to light the new court-house has been awarded to the AMERICAN WARMING & HEATING CO., of Pittsburg, at $8,600.

NEW CASTLE, PA.—Members of the committee of Councils are investigating a site for a municipal electric light plant.

PHILADELPHIA, PA.—A site at Jefferson and 13th Sts. has been purchased by the Philadelphia Electric Co. for an auxiliary plant. H. C. Lucas is Pur. Agt.

WARREN, PA.—Two new rotary converter stations will be constructed by the Warren & Jamestown St. Ry. Co. incident to the abandonment of the A. C. system and substituting A. C. current. Sam. J. Smith is Pur. Agt.

WILKES-BARRE, PA.—Plans have been filed by the Wilkes-Barre Light Co. for a new plant to be built on Washington St. E. A. Wakeman is Mgr.

YORK, PA.—The Edison Electric Light Co. has authorized Gordon Campbell, Pres., 27 West Market St., to proceed with the erection of an additional steam plant. Westinghouse, Church, Kerr & Co., New York, are Engrs.

BALTIMORE, MD.—Bids will be received at the office of the City Register, City Hall, until 11 a. m., Feb. 15, for furnishing illuminating gas for street lamps and for use in all municipal buildings and other places within the city of Baltimore. Robt. J. McCuen is Supt. of Lamps and Lighting.

WASHINGTON, D. C.—Plans have been prepared for improving the street-lighting system on several prominent streets, which will involve an expenditure of about $12,000.

CANTON, GA.—The municipal electric light plant will be enlarged during the year, according to press reports. J. W. Alford is Supt.

DALTON, GA.—Bids will be received until Feb. 23 for miscellaneous electrical equipment by Mayor Trammel. An enlarged electric light plant will be located on the site now occupied by the municipal lighting plant and water supply station. A day service will be established when the new plant is completed. C. C. McCaney is Supt.

JACKSONVILLE, FLA.—The Jacksonville Electric Co. contemplates the construction of power plant at an estimated cost of about $450,000. It is expected that work on construction of the plant will begin in March. The company is controlled by the Stone & Webster Engineering Corporation, of Boston, Mass.

SPEIGNER, ALA.—Bids are being received by J. Craig Smith, Pres. State Convict Bureau, Montgomery, Ala., for materials and labor to construct underground mains. Plans and specifications can be seen at the office of Edgar B. Key, Ch. Engr. State Convict Bureau, Tuscaloosa, Ala.

MURFREESBORO, TENN.—The Davis Elam Gas & Electric Co. will make extensive improvements this year. D. F. Elam, Jr., is Mgr.

AKRON, OHIO.—The Northern Ohio Traction Co. has awarded the contract for new equipment to the GENERAL ELECTRIC CO. The order includes a 1,000-KW. motor generating set, a 75-KW. generator, a 115-HP. motor and eight 4-motor car equipments, including controllers and a switchboard. Noted on Jan. 5.

ARLINGTON, OHIO.—A new boiler and water softener will be installed in the municipal lighting plant, according to press reports. R. E. Dillon is Supt.

GASTON, IND.—R. A. Brown has leased a building here and is preparing to install an electric lighting and power plant in the town. He will furnish lights for streets and residences and power for small industries.

PERU, IND.—Extensive improvements will be made at the municipal electric-light plant. G. P. Wing is Supt.

GRAND RAPIDS, MICH.—The Grand Rapids Gas Light Co. contemplates an expenditure of between $40,000 and $50,000 in the extension of mains and some improvements to plant.

IRON MOUNTAIN, MICH.—D. W. Mead, Consult. Engr., Madison, Wis., is preparing plans and specifications for the equipment of a hydro-electric plant on the Menominee River near Iron Mountain, for the Oliver Mining Co. The plans are not completed, but it is probable that the initial installment will comprise three 1,000-KW. generators, direct connected to twin turbine units operating under a normal head of 40 ft. Cost, about $700,000.

COAL CITY, ILL.—The Economy Light & Power Co., Joliet, Ill., contemplates the construction of a new power plant in Coal City. J. R. Staley, Joliet, is Supt.

BURLINGTON, IOWA.—A 50,000-HP. power plant is under consideration, according to press reports. J. W. Albright is interested.

CENTRAL CITY, IOWA.—The City Council is considering granting a franchise to Fred J. Cross to install an electric light plant in Central City. It is reported that a plant to cost $30,000 will be built if a franchise is granted.

IOWA FALLS, IOWA.—A franchise to supply heat and light in Iowa Falls for 25 years is being sought by O. F. Peterson, Des Moines.

MANY, IOWA.—A municipal electric-light plant, water-works system and ice factory is under consideration.

NEW LONDON, IOWA.—A contract has been awarded to LEONARD WALLER, according to press advices, for the construction of a temporary building for the municipal electric light plant, which was recently destroyed by fire. Preparations are being made to rebuild the plant. Gilbert Jackson is Supt.

NEWTON, IOWA.—A municipal gas plant is contemplated at a cost of $40,000. E. C. Finch is City Clk.

RED OAK, IOWA.—The Red Oak Electric Co. expects to install new boilers this year. S. F. Schadel is Mgr.

WEBSTER CITY, IOWA.—The city has purchased a site for a new light and power plant to be installed at a cost of $50,000.

SCOTT, KAN.—A franchise for an electric light and power plant will be granted. W. I. Silvey is City Clk.

SPRINGHILL, KAN.—At a special election held recently it was voted to issue $6,000 in bonds to install an electric-light plant.

WAMEGO, KAN.—Plans are being considered to install a 200-KW. single-phase generator, direct-connected to Corliss engine, in the municipal electric plant. D. A. Course is Supt.

WILLIAMSBURG, KAN.—This city is negotiating to secure electricity from the municipal electric light plant in Ottawa. W. O. Myers, Ottawa, is Mgr.

NORFOLK, NEB.—A special election will probably be called to vote on issuing $55,000 of bonds to install a municipal lighting plant.

WYMORE, NEB.—We are advised that bids will be received until Feb. 23 for a water supply and electric lighting station to cost about $57,000. Henry Hohl is City Engr.

MENNON, S. DAK.—A franchise to operate an electric lighting plant has been granted to Peter A. Orth.

AURORA, MO.—A franchise has been granted to the Lawrence County Water, Light & Cold Storage Co. to construct and operate electric and water plants in Marion. The company proposes to install a plant costing about $40,000.

KIRKSVILLE, MO.—The City Council will ask the voters to support a $65,000 bond issue to construct a municipal electric plant.

McPHERSON, MO.—A municipal electric light plant is under consideration.

ST. LOUIS, MO.—The La Clede Gas Light Co. has awarded the contract for a new gas holder to the RITER-CONLEY MFG. CO., Pittsburg, Pa., at about $40,000.

RUSSELLVILLE, ARK.—An auxiliary plant will be built by the Russellville Water & Light Co. A transmission line to Atkins will be built in the near future. C. S. Bacon, Pine Bluff, Ark., is Vice-Pres. and Mgr.

WYNNE, ARK.—The municipal electric lighting station will be rebuilt changing from D. C. to A. C. current. Bonds for $40,000 will be issued to provide funds. F. E. Leonard is Mgr. and Ch. Engr.

BRYAN, TEX.—See item under Manufacturing Plants.

CELINA, TEX.—A franchise has been granted to the Celina Electric Light & Power Co. to operate here.

OKLAHOMA CITY, OKLA.—The contract for installing a heating and ventilating system in the U. S. public building here has been awarded to the MacMAHON CO., Kansas City, Mo., at $20,800.

FORT MORGAN, COLO.—A 250-HP. boiler will be purchased for the Municipal Water and Light plant. George L. Cox is Supt.

COTTAGE GROVE, ORE.—Improvements aggregating $12,000, which have been pending contingent on the granting of a 25-year franchise, will now be made, as the desired franchise has been secured by the Cottage Grove Electric Co. M. M. Shinn is Secy.

EUGENE, ORE.—A proposition to erect a $15,000 to $30,000 municipal electric plant will be submitted to the voters at the April election.

COLTON, CAL.—Bids are being received for a 600-cu. ft. air compressor, three 6-in. air lifts, two motors and two transformers. E. M. Crilly is Mgr.

DEL MAR, CAL.—Another unit will be added to the plant of the South Coast Land Co., according to press reports, and the transmission lines extended. W. L. Abdell is Mgr.

GILROY, CAL.—The Coast Counties Power Co., Santa Cruz, has submitted a plan to the City Council to make several extensions to the lines of the municipal plant and operate it on a percentage basis. S. W. Coleman, Santa Cruz, is Mgr. of the company.

REDDING, CAL.—A water right on the Sacramento River, three miles north of this place, has been located by George L. Bancroft, Denver, Colo., who claims 25,000 ins. of water.

SACRAMENTO, CAL.—The contract for lighting the city during 1911 has been awarded to the SACRAMENTO GAS & ELECTRIC RY. CO. New ornamental lamps are to be provided by July 1.

WHITTIER, CAL.—The contract for a heating and ventilating plant at high school building has been let to MACHINERY & ELECTRICAL CO., Los Angeles, at about $7,000.

WINNIPEG, MAN.—The contract to furnish two 500-KW. generators has been awarded to SIEMENS BROS. DYNAMO WORKS, Toronto, Ont., at $16,410.

CALGARY, ALTA.—According to specifications which have passed the Council the city will spend $300,000 this year in enlarging its electric plant and extending the system.

EDMONTON, ALTA.—The city has made application to the Dominion Government to develop 60,000 HP. on the Athabasca River. As soon as the application has been granted work will start, rough plans having already been prepared.

STRATHCONA, ALTA.—Bids addressed to David Ewing, Chief Engr. Power House, Strathcona, for engines, boilers and generators, will be received until noon, Mar. 1. Specifications may be obtained upon application to A. J. McLean, City Engr.

PENTICTON, B. C.—The City Council is about to install a municipal electric light and power plant.

BRIDGES.

(*Denotes that this work is advertised in Engineering News.)

ANSONIA, CONN.—This city is considering the construction of a new bridge, probably of reinforced concrete, across the Naugatuck River, to replace the present wooden truss bridge at Bridge St. V. B. Clarke is City Engr.

SARATOGA SPRINGS, N. Y.—Bids will be received by Patrick Leonard, Town Clk., until 2 p. m., Feb. 14, for the construction of a steel truss bridge, 90 ft.-span, and concrete foundations. Plans and specifications may be obtained from John E. Hodgman, County Supt., Masonic Temple, Saratoga Springs.

TROY, N. Y.—Bids will be received by the Board of Contract and Supply, James M. Riley, Secy., until 11 a. m., Feb. 14, for repairing the Rensselaer St. viaduct. The following quantities of material and work will be required: 125,000 lbs. new structural steel, 4,400 lbs. reinforcing steel, 90 cu. yds. old masonry to be removed, 65 cu. yds. concrete in piers and abutment, 37 cu. yds. cinder concrete in sidewalks, 514 sq. yds. wood block pavement. Estimated cost, $8,000. Plans and specifications are on file at the office of the City Engineer.

YONKERS, N. Y.—The city is considering the construction of a concrete bridge, 50 ft. wide, with steel reinforcements, at a cost of $170,000. Samuel L. Cooper is City Engr.

ALLENTOWN, N. J.—A resolution has been adopted to repair and raise to the standard of Class A the following county bridges: Furnace Bridge, in the Sixth Ward; Bogert's bridge, over the Little Lehigh River; Schleicher's Bridge and Geiger's Bridge, over the Jordan River. Charles D. Weirbach is City Engr.

Press reports are to the effect that a steel bridge, to cost $100,000, will be constructed over Dry Run by the Central R. R. of New Jersey. J. O. Osgood, New York, is Ch. Engr. of Bridges.

BOONTON, N. J.—An appropriation of $8,000 has been made to build a bridge over the Rockaway River, just below the dam of the Jersey City reservoir.

ROSELLE PARK (Elizabeth post-office), N. J.—The Central R. R. Co. of New Jersey has applied to the Borough Council for permission to replace the Walnut and Gordon St. bridges with higher structures of steel. J. O. Osgood, of New York, is Ch. Engr. of Bridges.

ALTOONA, PA.—Plans have been prepared and approved for the construction of the Seventh St. Bridge. The bridge will be 168 ft. long, and will cost approximately $75,000.

BROWNSVILLE, PA.—The Board of Viewers of Fayette and Washington Counties have decided to erect a bridge over the Monongahela River, at an estimated cost of $132,000. The Penn Bridge Co., Beaver Falls., Pa., has completed plans for the structure.

HANOVER, PA.—The County Commissioners have decided to erect a concrete bridge across Furnace Creek, which separates Penn and Manheim Townships. Work will be commenced about the first of April. Adam E. Kohr is City Engr.

READING, PA.—The County Commissioners have engaged W. G. Stearns, of New York, tot make test borings for the construction of piers for the new Penn St. bridge. Noted on Jan. 26.

WILKES-BARRE, PA.—Plans are being prepared by Torren & Taylor, New York, for the construction of a steel and concrete bridge at South St. B. K. Finch is City Engr.

BALTIMORE, MD.—We are officially advised that a steel bridge on concrete foundation, at an estimated cost of $15,000, will be constructed at Sharptown. The bridge will have six spans, 25 ft. wide. Noted on Feb. 2.

RICHMOND, VA.—Bids were received on Feb. 1, for constructing a reinforced concrete bridge over the James River, as follows: McLean Contracting Co., Baltimore, Md., $261,000, alternate bid with different plan of reinforcement, $252,000; railway tracks, $9,000. Southern Ferro Concrete Co., Atlanta, Ga., $222,000. I. J. Smith & Co., Richmond, seven designs as follows: $210,275, $195,000, [illegible] 370, $216,737, $224,774, an[illegible] M. Alport & Sons, Richm[illegible] Thomas Phee Construction [illegible] $215,800. Charles B. Clark [illegible] more, Md., $179,400; paving, [illegible] $10,800. Carolina Concrete [illegible] N. C., eight designs; $244,300, [illegible] 500; $220,600; $212,700, $2[illegible] $187,000. Snare & Triest C[illegible] St., $225,000. Fruin & Con[illegible] Co., St. Louis, Mo., $213,750. [illegible] neering Co., Baltimore, Md., [illegible] duct for creosote wood pav[illegible] vitrified brick paving, $5,000; [illegible] way tracks, $7,000. Piedmon[illegible] Co., Atlanta, Ga., $224,000; [illegible] Hennebique Construction Co. [illegible] $168,000, $222,000 and $22[illegible] Corse, Racine, Wis., $222,47[illegible] Structural Concrete Co., $221,[illegible] Rarland & Co., Richmond, [illegible] Noted on Dec. 8.

KENOVA, W. VA.—The Norfolk & Western R. R. Co. has awarded the contract for the coonstruction of the Kenova bridge over the Ohio River, to the AMERICAN BRIDGE CO., of Pittsburg, Pa., and 30 Church St., New York. About 12,000 tons of fabricated steel will be required.

LOUISVILLE, KY.—Plans and specifications are now being prepared by David R. Lyman, City Engr., for the proposed bridge over Beargrass Creek, on Underhill St., between Adair and Kentucky Sts. The cost of the bridge is estimated at $15,000 and is to be completed this summer.

BOLIVAR, OHIO.—The Commissioners of Tuscarawas County have declared their intention to move the bridge over the Tuscarawas River, near Bolivar, 300 ft. further up the river; also to build the necessary extensions and approaches, and to build a bridge over the Ohio Canal at the foot of Water St., in the village of Bolivar.

CELINA, OHIO.—Bids will be received by the Commissioners of Mercer County until 10 a. m., Feb. 13, for constructing the steel superstructure of a 1-span bridge, 126 ft. long, with a 14-ft. roadway, known as the Post Bridge. Plans and specifications are on file with J. L. Morrow, County Audr.

LORAIN, OHIO.—Bids will be received by the Commissioners of Lorain County until 1 p. m., Feb. 27, for constructing a steel bridge, known as the Campbell Bridge. Charles Chandler is Clk. Bd.

SANDUSKY, OHIO.—Bids are being received by the County Auditor for the construction of six bridges in various parts of the county.

KALAMAZOO, MICH.—The following bids have been received by the City Council for constructing the new concrete Gull St. bridge: Herman Tapp Construction Co., Fort Wayne, Ind., $21,500 and $21,000; Carpenter & Anderson, Grand Rapids, Mich., $19,959; Richard Heystek, Kalamazoo, $20,645; Huron Bridge & Iron Co., Port Huron, Mich., $19,850, $18,600 and $16,900; La Fafayette Engineering Co., La Fayette, Ind., $18,500, $18,050 and $22,071; Henry L. Vanderhorst, Kalamazoo, arch bridge, $23,600; girder bridge, $21,000; C. Marsman, Grand Rapids, Mich., $21,480 ($100 less if iron rail is used); E. W. Seamans, Grand Rapids, $24,444; Illinois Bridge Co., Chicago, Ill., ten plans, ranging from $17,888 to $20,537; Wynkoop-McCormley Co., $19,900 and $18,900.

CHICAGO, ILL.—The following bridges have been condemned: Jackson Boulevard bridge to be removed by the city of Chicago and replaced by a bascule or vertical lift bridge before Nov. 1, 1913. Metropolitan Elevated Ry. bridge to be removed by the Metropolitan company and replaced before Nov. 1, 1913. Chicago Ave. bridge to be removed by the city of Chicago and replaced by a bascule or vertical lift bridge before May 31, 1914. Several new bridges will be built if the bond election for $4,655,000 carries. A bascule bridge, to cost $360,000, will be erected at La Salle St., and two bridges, at a combined cost of $250,000, will be built on California Ave. A temporary bridge, over the river at Indiana St., to cost $20,000, will also be constructed, and a bridge at Jackson Boulevard, to cost approximately $250,000, is being considered. George C. D. Leuth is Engr. Bd. Pub. Wks.

*PEORIA, ILL.—The contract for the construction of a bridge over the Illinois River at Bridge St., has been awarded to the MILWAUKEE BRIDGE CO., of Milwaukee, Wis., at $166,896. Bids were opened on Jan. 24. Noted on Feb. 2.

KIMBERLY, WIS.—The Kimberly-Clark Co. is contemplating the construction of a steel span part-swing bridge over the government canal at Kimberly, to replace the present wood bridge and ferry.

MILWAUKEE, WIS.—The plans for the 1-leaf, bascule bridge at Oneida St., has been approved by U. S. engineers here. Charles J. Poetsch is City Engr.

SUPERIOR, WIS.—Bids have been received as follows for the fill at the Nemadji River and the wooden bridge at East Fourth St.: Interstate Dredge & Dock Co., $41,840; Edward Gallagher, $42,500; E. A. Dahl & Co., $44,490; John Shea and William Walsh, $42,000; Barnett & Record, $44,475.

DEEPHAVEN, MINN.—The Commissioners of Hennepin County are considering the construction of a bridge over Carson's Bay, near Deephaven, at an estimated cost of $10,000. Hugh R. Scott is County Audr.

HALLOCK, MINN.—Bids will be received by C. J. Hemmingson, County Audr., until 2 p. m., Feb. 20, for constructing 15 corrugated steel culverts with concrete bulkheads and five small corrugated steel culverts without bulkhead, across judicial ditch No. 32; also seven corrugated steel culverts with concrete bulkheads and twelve small corrugated steel culverts with bulkheads, across judicial ditch No. 31.

WASECA, MINN.—Bids will be received by the Commissioners of Waseca County, until 2 p. m., Feb. 14, for the construction of one 20-ft. I-beam bridge on I-beam

foundation, and for repairing two others. Plans and specifications are on file with Theodore Peterson, County Audr.

*KANSAS CITY, MO.—The contract for building the bridge over the Blue River, at 15th St., has been awarded to the WILLIAM P. CARMICHAEL CO., of St. Louis, Mo., at $90,310. The other bidders were: S. M. Kerns, $89,510; Freeborn Engineering & Construction Co., $66,893; Kansas City Bridge Co., $84,926; Midland Bridge Co., $91,115; A. M. Blodgett Construction Co., $98,150.

The lowest bid received for the construction of the bridge over Bush Creek has been submitted by H. P. Thompson & Co., of San Antonio, Tex., at $14,056. The other bidders were: Midland Bridge Co., $15,659; W. P. Carmichael Co., $18,144; L. Crosby & Son, $21,031; A. M. Blodgett Construction Co., $19,904; the Missouri Valley Bridge & Iron Co., $27,930.

The plans of Waddell & Harrington have been accepted for the construction of the Twelfth St. viaduct. The estimated cost is $550,000. Louis R. Ash is City Engr.

FORT SMITH, ARK.—The contract for erecting the superstructure of a bridge over the Arkansas River between Fort Smith and Van Buren, Ark., was awarded on Feb. 2, to the ARKANSAS BRIDGE CO., of Fort Smith, at $415,000. The bridge will accommodate one railway track, two street car tracks, two roadways, and two sidewalks. It will be 60 ft. wide, and have nine spans. Waddell & Harrington, Kansas City, Mo., are Consult. Engrs.

HOUSTON, TEX.—Bids are being received for the construction of the Main St. viaduct. T. C. Tarver in City Engr.

DENVER, COLO.—Bids will be received by C. W. Comstock, State Engr., until noon, Feb. 8, for the construction of a 100-ft. steel span with concrete pier and abutments over the Arkansas River near Orchard Grove in Pueblo County. Plans and specifications are on file with the County Clerk, at Pueblo.

BOISE, IDAHO.—An appropriation of $10,000 has been made for the construction of a bridge at the foot of Overland Ave., spanning the Snake River.

SPALDING, IDAHO.—A steel and concrete bridge will be built by the Northern Pacific Ry. Co., over Clearwater River, at Spalding, to replace the wooden bridge now spanning the river. The new bridge will be 1,000 ft. long, and about 200 ft. further upstream. W. L. Darling, of St. Paul, Minn., is Ch. Engr. of Bridges.

SPOKANE, WASH.—Ordinances have been passed authorizing a bond issue of $415,000 to build two concrete bridges across Hangman Creek, one at Sixth Ave. and the other in Staffords Addition.

Plans have been completed for the construction of a bridge at Front Ave. and Sheridan St. Morton Macartney is City Engr.

MODESTO, CAL.—Bids will be received by S. B. Mitchell, Clk., Bd. of Supervisors, until 2 p. m., Feb. 14, for repairing a bridge over the Snake Ravine in Section 20.

ST. GEORGE DE BEANCE, QUE.—Bids will be received by Charles Boldus, City Secy. and Treas., until Feb. 13, for constructing an iron and concrete bridge over the Chaudiere River, at St. George de Beance.

OTTAWA, ONT.—A bridge to cost $30,000, will be constructed by the Grand Trunk Railway at Elgin St., to replace the old railway structure.

EDMONTON, ALTA.—The city has voted in favor of issuing bonds for $164,000, for the construction of a steel bridge over the Saskatchewan River.

EDSON, ALTA.—CREELMAN & VERGE have been awarded the contrtact for all the bridges on the branch line of the Grand Trunk Pacific Ry. south and north of here.

Two steel bridges and two tunnels are required by the Grand Trunk Pacific Ry. between here and the Rocky Mountains, bids for which will be asked at once.

TRAIL, B. C.—Bids will soon be received for the construction of the provincial government bridge across the Columbia River. The estimated cost is $90,000.

BUILDINGS.

(*Denotes that this work is advertised in Engineering News.)

BOSTON, MASS.—The International Society of Christian Endeavor plans the erection of a 4-story building for its headquarters, on Longwood Ave. Estimated cost, $200,000. Brainerd & Leeds and Ascar A. Thayer, Ford Bldg., are the Archs.

It is the purpose of the Armory Commission to construct two state armories this year. One will be located in Natick and the other in Milford. The cost of each will be about $56,000. A third may be ordered later, as three per year are authorized. Gardner W. Pearson is Adjutant-General.

Bids will be received until Feb. 15, for the construction of an elementary school house in the Commissioners District. Chas. Logue, 120 Boylston St., is Chn. School House Comn.

The Board of Selectmen will erect a town hall, to be a 2-story structure of brick construction. The estimated cost is $66,000. H. F. Wilson is Chn.

The GEORGE A. FULLER CO., 131 State St., Boston, has been awarded the contract for the brick and stone for the new 7-story hotel to be built in Copley Sq. for the Copley Sq. Trust and to be leased by the Copley-Plaza Operating Co., care Frederick Sterry, 111 Broadway, New York. The plans were drawn by H. J. Hardenburg, 47 West 34th St., New York, and call for a structure 125 x 200 ft. Estimated cost, $2,750,000.

CAMBRIDGE, MASS.—A group of six buildings is planned for chemical research as an adjunct to Harvard University. Estimated cost, $1,200,000. Enough has been raised to erect one building. Alexander W. Longfellow, Tremont Bldg., is the Archt.

CAMBRIDGE, MASS.—Plans have been prepared by Herbert L. Wardner, 93 Federal St., Boston, for a garage and aerodrome building, to be erected on the Parkway, Cambridge. M. H. Gulesian is the owner. The estimated cost is $200,000.

GARDNER, MASS.—It is reported that a church will be built here for the Holy Rosary R. C. congregation. Estimated cost, $75,000. Father Jules Graton may be addressed.

PLYMOUTH, MASS.—The erection of a 2-story brick memorial hall on Middle St. is contemplated by Collingswood Post 76, G. A. R. The cost is estimated at $50,000.

PROVIDENCE, R. I.—The Rhode Island Medical Society is planning to spend about $50,000 for a new building at corner of Francis and Hayes Sts. It will be of colonial style, two stories and basement. Clarke, Howe & Homes are the Archts.

BRIDGEPORT, CONN.—The Common Council has voted in favor of issuing $225,000 of bonds for the construction of an almshouse here.

Bids will be received until Feb. 10, for the erection of a theatre building on Main St. A. E. Westover, Keith Bldg., Philadelphia, Pa., is the Arch.

Press reports state that this city is planning to spend $225,000 for a new almshouse to accommodate 500 persons. A special committee has been appointed to take charge of the matter.

A bill has been introduced in the State Legislature authorizing an issue of $300,000 in bonds for the erection of a new high school in this city.

HARTFORD, CONN.—Bids will be received until Feb. 15 for the new building of the Southern New England Telephone Co. on Pearl St. The plans were prepared by L. W. Robinson, New Haven, Conn., Arch., and provide for a brick and steel building, 48 x 127 ft., six stories high in front and seven in the rear.

*NEW LONDON, CONN.—Bids will be received until 11 a. m., Mar. 7, by Capt. F. F. Arnold, Constr. Q. M., U. S. A., for the construction of a brick hospital, including plumbing, hot-water, heating, electric wiring and fixtures.

WATERBURY, CONN.—Plans will be completed about Mar. 1 by Morgan Keane & G. G. Webb, 25 West 42d St., New York, for a 7-story, fireproof apartment block at the corner of West Main and State Sts., for P. H. Carroll. The building will be 136 x 110 ft., with steel frame, first two stories limestone face, balance tapestry brick with limestone trim.

A measure has been introduced in the State Legislature making an appropriation of $175,000 for a national guard armory here.

ALBANY, N. Y.—The contract has been awarded to the TURNER CONSTRUCTION CO., 11 Broadway, New York, for the construction of a reinforced concrete warehouse for Selfride & Langford, 99 Central Ave., Albany. The structure will be 72 x 160 ft. and five stories high. C. G. Ogden is Arch.

ITHACA, N. Y.—Cornell University has received a $50,000 bequest for a new building to house the machinery workshop of the Sibley College of Mechanical Engineering.

NEW YORK, N. Y.—A 10-story apartment house will be erected on the north side of Convent Ave. and 140th St. The estimated cost is about $300,000. Geo. Fred. Pelham, 517 Fifth Ave., New York, is the Arch.

The contract has been awarded to F. T. NESBIT & CO., 116 Nassau St. for constructing a new front and making interior changes to the Hackett Theatre, Eighth Ave. and 42d St. The estimated cost is $16,000. Hert & Tallant, 113 E. 19th St., prepared the plans.

Plans are being prepared by Buchman & Fox, 11 East 59th St., for the construction of a store and loft building, 92 x 100 ft., located on the south side of 18th St., 82 ft. east of Sixth Ave. J. G. McGrorey & Co. are the owners.

Plans will be prepared by Max Muller, 115 Nassau St., for the construction of a 5-story stable building at 125 Columbia St. M. Rosenfeld is the owner.

Plans have been prepared by J. C. Crocker, 2017 Fifth Ave., for the construction of two apartment houses at 171st St., and Audubon Ave. The building will be five stories high, 58 x 85.6 and 42 x 83.6 ft. respectively. The Harvey Realty Co., 40 East 22d St., is the owner.

The contract has been awarded to the KRAMER CONTRACTING CO., 35 Nassau St., for the construction of two 6-story apartment buildings, 99 x 95 ft., on the north side of 141st St., 275 ft. west of Lenox Ave. The estimated cost is about $400,000 George Fred. Pelham, 507 Fifth Ave., is the Arch.

A 5-story brick tenement building will be erected on the southeast corner of 175th St. and the Grand Concourse by Nathan B. Levin Co., 1910 Webster Ave. John E. Kerby, 18 East 42d St., is the Arch.

Heyman Erkman, 1054 Grant Ave., will erect on the corner of 169th St. and Fulton Ave., a 5-story brick tenement building. Goldner & Goldberg, 704 Jackson Ave., are the Archs. The estimated cost is about $85,000.

NEW YORK, N. Y.—The Comfort Realty Co., 8 West 39th St., will erect a 6-story, brick and stone tenement building on the northwest corner of 162d St. and Broadway. The estimated cost is about $180,000. Schwartz & Gross, 347 Fifth Ave., are the Archs.

George and Edward Blum, 505 Fifth Ave., are preparing plans for the construction of two 12-story brick and stone apartment buildings, 56.8 x 82 ft., at 225 119th St. B. Crystal & Sons, 21 West 34th St., are the owners.

George Fred. Pelham, 503 Fifth Ave., is preparing plans for the construction of a 6-story brick and stone tenement building, 132 x 865 ft., at 153d St., west of St. Nicholas Ave. The estimated cost is $200,000. M. R. L. Building Co., 314 W. 100th St., is the owner.

Samuel Sass, 32 Union Sq. is preparing plans for the construction of a 6-story brick and stone tenement building at 146th St., west of Amsterdam Ave. The Riverview Construction Co. is the owner. The estimated cost is $50,000.

The Kuhn Lawson Co., 508 West 142d St., will erect two 5-story brick tenement buildings at 186th St., 100 ft. west of Amsterdam Ave. The cost is $150,000. J. C. Crocker, 2017 Fifth Ave., is the Arch.

NEW YORK, N. Y.—Schwartz & Gross, 347 Fifth Ave., are preparing plans for the construction of a 10-story, brick and stone apartment house, 204.4 x 51.6 ft., at 82d St. and Madison Ave. The estimated cost is $750,000.

The Ottoxeter Building Co., 571 West 139th st., will erect at 140th St. and Convent Ave., a 10-story brick and stone tenement building. The estimated cost is about $300,000. George F. Pelham, 507 Fifth Ave., is the Arch.

The Charles J. Weinstein Realty Co., 1267 Fifth Ave., will erect a 7-story brick and stone loft, 25.10 x 6.8, at 118 Forsyth St. The estimated cost is $45,000. C. B. Meyers, 1 Union Sq., is the Arch.

S. Bernstein, 368 Cherry St., will erect at 363 Gouverneur St., a 6-story brick and stone stable and loft building, 59.10 x 58.1. The estimated cost is $40,000. O. Reissmann, 30 First St., is the Arch.

Dodge & Morrison, 82 Wall St., have been commissioned to prepare plans for an edifice to be erected at the southwest corner of Green and Patchen Aves., by the Trinity Baptist Congregation, Brooklyn, New York. V. Ketchum, 129 Ralph Ave., is Chn. of the Bldg. Com.

Adolph Mertin and M. E. Rountree, 34 West 28th St., are preparing plans for the construction of four 5-story flat buildings between 179th and 180th Sts., and Pinehurst Ave., for the Rountree Realty Construction Co., 609 Fifth St., Brooklyn.

NEW YORK, N. Y.—The contract has been awarded to the TURNER CONSTRUCTION CO., 11 Broadway, New York, for the construction of a reinforced concrete warehouse for Selfridge & Langfor, 99 Central Ave., Albany, N. Y. The building will be 72 x 160 ft., five stories and basement. Also for a reinforced concrete tannery building for George Laub & Sons, at Buffalo, N. Y. The building will be 120 x 120 ft., and five stories high. C. G. Ogden is Arch.

OSWEGO, N. Y.—Bids will be received until Feb. 18 by George B. Post & Sons, 347 Fifth Ave., New York, for the construction of a 4-story hotel for the Oswego Hotel Corporation. The estimated cost is about $150,000.

TROY, N. Y.—The construction of a building is contemplated by the Sisters of Charity in charge of the Troy Hospital. The estimated cost is $300,000. No plans have been prepared.

WHITESTONE, (L. I.) N. Y.—C. R. Van Buskirk, 180 Montague St., Brooklyn, is preparing plans for the construction of ten 2-family dwellings, 20 x 55 ft., on Seventh Ave. The estimated cost is $55,000. C. W. Youngman is the owner.

ATLANTIC CITY, N. J.—Theodore A. Meyer, 18 East 42d St., New York, is preparing plans for the construction of a 10-story, fireproof hotel, with all modern conveniences, at the northerly end of the board walk at Atlantic City.

BUTLER, PA.—A high-school building will probably be erected here by the Trustees of West Sunbury Academy.

HARRISBURG, PA.—The Pennsylvania R. R. Co. will erect, at Division St., a large freight transfer station. The estimated cost of the structure is about $200,000. W. B. McCaleb is Supt.

PHILADELPHIA, PA.—J. T. Windrim, Commercial Bldg., Arch., is preparing plans for the erection of a 5-story rear addition, 58 x 104.10 ft., to the First National Bank, on Chestnut St. The estimated cost is $200,000.

Saver & Hahn, 1112 Chestnut St., Archs., are preparing plans for the erection of a 2-story reinforced concrete warehouse, 90 x 150 ft., at 24th and Wood Sts., for Ford & Kendig.

PITTSBURG, PA.—John H. Elder will erect a residence on an unimproved frontage of 120 x 135 ft. on Heberton Ave., between Wellesby Ave. and Stewart St. The estimated cost of the building is about $40,000.

A 3-story brick and steel mercantile building will be erected at Penn and Shady Aves, Seventh Ward, by Cruthfield & Woolfolk. The estimated cost is about $75,500.

A maternity hospital will soon be constructed by the Trustees of the Magee Estate. The estimated cost is about $500,000. Dr. Charles Edward Ziegler is interested.

WILLIAMSPORT, PA.—The Dickinson College alumni in northeastern Pennsylvania are about to organize a movement to secure for the college a new building for the Dickinson School of Law.

BALTIMORE, MD.—Bids will be received until Feb. 11 by George W. Rife, 1 North Calvert St., for the construction of a theater at 311-317 West Fayette St. The building will be three stories high, 156 x 100 ft., of brick and concrete construction. Otto Simonson, American Bldg., Baltimore, is Assoc. Engr.

A Roman Catholic church will probably be erected at Forest Park. Bishop O. B. Corrigan is interested.

BALTIMORE, MD.—Phillip C. Mueller Building Co., 3722 Foster Ave., will erect 150 dwellings on Foster and Fait Aves., Sixth and Seventh Sts., two stories, cement yards, walks and cellars, electric lights, hot air heat. Cost is about $200,000.

OWINGS, MD.—Maryland Asylum and Training School for Feeble-minded opened bids for erection of four buildings. Henry S. Rippel, 7 Clay St., Baltimore, Md., is the lowest bidder at $134,629. Plans have been prepared by Ellicott & Emmart, Union Trust Bldg., Baltimore, Md.

WASHINGTON, D. C.—Bids were received as follows on Feb. 3, by the Commissioners of the District of Columbia, for the construction of a 12-room school building at the southeast corner of T and Eighth Sts., N. W., Washington, D. C.: Skinner & Garrett, $99,793; R. T. Humphreys, $102,000; Burgess & Parsons, $96,925; Hoyle-Robertson Construction Co., $98,471; Davis Construction Co., $98,750; E. G. Heflin, Fredericksburg, Va., $97,583; W. H. McCray, $102,000; W. E. Mooney, $97,995; George E. Wyne, $92,500; Hoge & Luckert, Inc., $96,392; H. J. Montgomery, $113,000; Thomas H. Melton, $95,550. All of Washington, D. C., unless otherwise specified.

WASHINGTON, D. C.—Plans are being prepared by Harding & Upman, 729 15th St., for the construction of an 11-story office building which will be erected at 15th and H Sts., N. W.

NORFOLK, VA.—The contract to erect the police station and police court has been awarded by the Board of Control to RICHARDSON & SON, Hampton, Va., at $44,273.

RICHMOND, VA.—Plans are being prepared by Bissell & Sinkler, Bailey Bldg., Philadelphia, Pa., for the construction of a memorial building in Richmond for the Confederate Memorial Association. The building will be one story high, 60 x 160 ft., and of marble. The cost is $150,000.

The University College of Medicine has been granted a permit to erect a new building here. The estimated cost is about $130,000.

COLUMBIA, S. C.—The contract has been awarded to the CENTRAL CAROLINA CONSTRUCTION CO., Greenboro, N. C., for the construction of a Y. M. C. A. building here. H. F. Stratton is Gen. Secy. The estimated cost is $98,000.

UNION, S. C.—A site has been selected and bonds sold to the amount of $75,000 for the construction of a court house.

MILLEDGEVILLE, GA.—Plans have been prepared by A. C. Bruce, Atlanta, for the construction of a prison building. The structure will be of reinforced concrete, and the furnishings will cost about $15,000. It will be fireproof, thoroughly modern in all its details and provided with all modern conveniences.

NASHVILLE, TENN.—A bill appropriating $50,000 to erect and equip a juvenile reformatory near Nashville has been passed by the Senate.

LEXINGTON, KY.—Bids will be received until Mar. 1 by the Board of Education for the erection of a school. Garber & Woodward, Cincinnati, are the Archs. The cost is about $40,000.

LOUISVILLE, KY.—Plans have been prepared by McDonald & Dodd for the erection of a 10-story apartment house. The plans have been submitted to Col. R. J. Tilford, Building Inspector. The estimated cost is about $400,000.

OWENSBORO, KY.—The Masons will probably erect a 10-story steel office building at Third and St. Ann Sts. The estimated cost is about $150,000.

CANTON, OHIO.—Oscar Steiner, Supt. of Buildings, has been ordered to start work immediately on plans for a new grammar school building, to be erected during the summer at Cedar and Florence Sts.

CLEVELAND, OHIO.—Bids will be received until Mar. 1 by Charles Orr, Dir. of Schools, for the construction of a technical high-school. The estimated cost is about $400,000.

NEW PHILADELPHIA, OHIO.—The Board of Education is considering the erection of a school building. The question of issuing bonds for $100,000 has been put to a vote. E. E. Utterback is Clk. Bd. of Education.

PORTSMOUTH, OHIO.—The FERRO CONCRETE CONSTRUCTION CO., Columbus, Ohio, has been awarded the contract for the construction of a business block by the Gilbert Grocery Co., at $61,720.

PORTSMOUTH, OHIO.—The contract has been awarded to the FERRO CONCRETE CONSTRUCTION CO., Cincinnati, to erect a 4-story building for the Gilbert Grocery Co., at $100,000.

YOUNGSTOWN, OHIO.—Bids will be received until Feb. 15 by the Board of Education, of Boardman Township School Dist., Mahoning County, for furnishing labor and material necessary to construct a brick school building at Boardman Center. Plans and specifications may be seen at the office of C. F. Owsley, 552 Dollar Bank, Youngstown.

BOONVILLE, IND.—Frank Schlatter, Evansville, Ind., Arch., has been employed to prepare plans for the complete remodeling of the Weyerbacher Building to be used for a postoffice. The government has secured a ten-years' lease on the property. The postmaster at Boonville will receive bids for the contract soon.

DECATUR, IND.—Oscar Huffman, Arch., is preparing plans for the erection of a brick school house on the site of the Deboit school house recently destroyed by fire. Mr. Huffman will receive bids until Feb. 15.

The School Board is planning the construction of a high school building.

ELKHART, IND.—George Dall will soon ask for bids for the erection of a large business building on a site adjoining the Bucklen Theater. The building will be of brick and stone and four stories high. E. Hill Turnock is Arch.

MADISON, IND.—JAMES WHITE has been awarded a contract to erect the new Pythian Building at this place at $20,000, exclusive of heating and lighting.

INDIANAPOLIS, IND.—The Board of School Commissioners will receive bids until 8 p. m., Feb. 24, for the remodeling, enlarging and improvement of School No. 10,

corner of Ashland Ave. and 13th St. Vannegat & Bohn are the Archs. John E. Cleland is Business Dir.

MONTICELLO, IND.—George W. Walverton will soon ask for bids for the erection of a large stock barn on his farm west of this city. Sam Young, Arch., is preparing the plans.

PERU, IND.—Benjamin E. Wallace has received plans on which he will soon ask for bids for the construction of a large apartment house on Miami St.

DETROIT, MICH.—The Cadillac Motor Car Co., 1343 Cass Ave., Detroit, is having plans prepared for a new 2-story warehouse, 78 × 200 ft. Owners will purchase materials and let all contracts. Building to be constructed of stock brick, Bedford stone, composition roof, structural iron and electric fixtures.

R. H. Marr, 1529 Ford Bldg., Detroit, is preparing plans for remodeling the building used by the Board of Health, at 223 St. Antone St. The Board of Health will advertise for bids soon.

Varney & Varney, 307 Palmer Bldg., Detroit, are preparing plans for a 2-story and basement Academy and office building, 50 × 200 ft., for George Schumaker, 79 Horton Ave. Architects will receive bids about Feb. 15. Cost, $40,000.

Hary J. Rill, 54 Buhl Block, Detroit, has prepared plans for a new $60,000-chapel, 275 × 17.6 ft., for the Sisters of Good Shepherd, Mother of St. Lawrence, Provincial, Carthage, Ohio. S. Hannaford & Son, Hurlburt Bldg., Cincinnati, Ohio, Superv. Archs., are receiving bids.

G. A. Mueller, 804 Breitmeyer Bldg., Detroit, is preparing plans for a 3-story and basement addition to the plant and office building of the Detroit Steel Cooperage Co., M. C. R. R. and Sylvester Ave.

C. Howard Crane, 712 Ford Bldg., Detroit, will receive bids about Feb. 10, on the theatre, 126 × 85 ft., for the Columbia Theatre Co., Arthur Caille, Pres., 34 Monroe Ave. Cost, $100,000.

E. W. Gregory, Woodward and Smith Aves., Detroit, has been commissioned by Mrs. Lottie Wolf Kendall, 214 Garfield Ave., to prepare plans for a 6-story and basement apartment house, 60 × 93 ft., to contain 27 apartments. The building will be located on High St., and will be constructed of press and stock brick, Bedford stone, composition roof, galvanized iron skylight, structural iron, hardwood finish and floors, ceramic tiling and electric fixtures. Cost, $60,000.

GRAND RAPIDS, MICH.—George L. Stone, Widdicomb Bldg., Grand Rapids, will receive bids soon on a new 8-story and basement furniture building, 50 × 175 ft., for the Furniture Temple Co., Lyon, Ionia and Division Sts., Grand Rapids. Cost, $80,000.

HILLSDALE, MICH.—Bids were received as follows on Feb. 3, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Hillsdale, Mich.: Ambrose B. Stannard, New York, limestone, $54,000; sandstone, $55,000. Northern Construction Co., Milwaukee, Wis., $56,000, $57,000. Harmon Bros. Co., Williamsport, Pa., $53,770. R. S. Moore, Lafayette, Ind., $55,388, $56,288. T. A. Fowler, Hillsdale, $64,700. Barnes Bros., Logansport, Ind., $51,700, $53,000. King Lumber Co., Charlottesville, Va., $54,000, $56,000. Charles W. Gindele Co., Chicago, $51,000, $51,850. Conners Bros. Co., Lowell, Mass., $60,000, $61,000. Charles Hoertz & Sons, Grand Rapids, Mich., $56,996, $59,900.

LANSING, MICH.—Bids will be received until noon Feb. 15, by A. M. Brown, Secy. State Bd. of Agriculture, for the construction of an addition to the chemical building of the Michigan Agricultural College. A. E. Bowd, Lansing, is Arch.

CHICAGO, ILL.—A 12-story building, costing $250,000, will be erected by the Franklin Co. at 428 Dearborn St. Edward D. Moeng is Pres.

JEFFERSON, WIS.—The Directors of the Farmers & Merchants Bank have voted to erect a new banking house, to be two stories high, 30 × 100 ft., of brick construction, with sandstone front in classic design. George J. Kispert is Cashier.

MERRILL, WIS.—Lincoln County Board of Supervisors has appropriated $38,000 for the purpose of building a new courthouse and county jail. Plans have been prepared by Foeller & Schober, Green Bay, Wis., Archs.

MILWAUKEE, WIS.—Betts & Hosmer, 121 Wisconsin St. have been commissioned to prepare plans for a clubhouse for the Kenwood Club, now being organized. The building will be of frame construction, two stories high, in rustic style. F. W. Ellis, 889 Summit Ave., is Secy.

Louis J. Petit, Pres. Wisconsin National Bank, has purchased the Black Block adjoining the Pabst (Wisconsin National Bank) Building, East Water and Wisconsin Sts., and will replace the present structure with a 14-story structure, which will be practically a duplicate of the banking house, and be used partly by the bank and trust company, the remainder for office purposes.

WAUPACA, WIS.—The Board of Education has received plans and specifications for a new public school building to cost approximately $50,000.

MINNEAPOLIS, MINN.—The contract has been awarded to H. L. STEVENS, of Kansas City, Mo., for the erection of a hospital at 14th and Willow Sts., opposite Loring Park, for Dr. G. G. Eitel. The cost will be $150,000.

FORT MISSOULA, MONT.—Bids in triplicate will be received until Feb. 28 by Lieut. Roy W. Winton, Constr. Q. M., U. S. A., for the construction of a hospital of reinforced concrete (including plumbing, electric wiring, fixtures and steam heating). Plans and specifications will be furnished on request.

CHAFFEE, MO.—Bids will probably be received until Mar. 1 by the Lindsay Architectural Co., 261 McCoy-Tanner Bldg., Sikeston, Archs., for the construction of a jail.

ST. JOSEPH, MO.—Plans are being prepared by Walter Boschen, St. Joseph, for the erection of the proposed building at Tenth and Faraon Sts., for the Y. M. C. A. Burtt S. Fenn is Gen. Secy. The estimated cost is about $150,000

ST. LOUIS, MO. — Bids will be received until Feb. 9 by George W. Pipe, Supt. Police Bldgs., for the construction of a patrol house and stable, at Gimblin Road and Broadway, for the Metropolitan Police Dept.

HOUSTON, TEX.—Plans are being prepared by J. Cooke & Son, Archs., for the erection of a large hotel here for C. H. Milby. The building will contain 150 sleeping rooms.

ROSWELL, N. MEX.—Bids will be received until Feb. 23 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of the proposed Federal building here. All bids received Feb. 2 were rejected. Noted on Jan. 5.

SALT LAKE CITY, UTAH.—Bids were received as follows on Feb. 3, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of an extension to the post-office building at Salt Lake City, Utah: George Hinchcliff Co., Logan, Utah, $215,000; William H. Maxwell, Great Falls, Mont., $215,000; Conners Bros. Co., Lowell, Mass., $206,000; Campbell Building Co., Salt Lake City, $197,800.

SPOKANE, WASH.—Bids will be received until Feb. 20 by the Board of Public Works for the erection of a brick and cement building at the Lincoln Heights Reservoir. J. C. Argill is Secy.

ASHLAND, ORE.—Bids will be received until Mar. 3 by Thomas Simpson, Clk. of School Dist. No. 5, for the erection of a high-school building. Plans and specifications have been prepared by George Ferris & Co., Reno, Nev.

PENDLETON, ORE.—Bids will be received until Mar. 1 by M. P. White, 610 Main St., Pendleton, for the construction of St. Mary's Church, Pendleton. Plans and specifications may be obtained from the Rev. J. M. Cataldo, Pendleton.

PORTLAND, ORE.—A 12-story reinforced concrete building will be erected by the Princeton Trust Co. at Park and Morrison Sts. The estimated cost is $300,000. W. Y. Master is Secy.

MONROVIA, CAL.—The Board of Education has awarded contract to G. W. BELL, 602 East 27th St., Los Angeles, at $54,580, for the construction of a high school and manual arts school here. The MACHINERY & ELECTRICAL CO., 351 North Main St., Los Angeles, was awarded the contract at $4,123 for the construction of the heating and ventilating systems. The contract for the plumbing was awarded to COONEY & WINTERBOTTOM, 1402 Alhambra Road, Los Angeles, at $4,565. Two buildings will be erected. The academic building will be two stories in height, 200 × 88 ft. and the manual arts building will be one-story in height, 100 × 32 ft., with a rear wing, 32 × 53 ft. The construction of both buildings will be of brick with cement plastered exterior, concrete foundation, red Spanish tile roof. Allison & Allison, Exchange Bldg., Los Angeles, are Archs.

OAKLAND, CAL.—A concrete building, to cost about $75,000, will be erected by the Industrial Home of Mechanical Trades for the Adult Blind here. The State Engineer is interested.

HAMILTON, ONT. — The International Harvester Co. has awarded the contract for its new office building here to GEORGE E. MILLS, of Hamilton, Ont., at $41,000.

TORONTO, ONT.—The Canadian Pacific Co. is having plans prepared at the head office in Montreal for an office building to be erected here. It will be 16 stories, steel and stone and terra cotta facing and will cost $1,000,000. Bids for construction will be asked soon.

The Dominion Bank has purchased the northeast corner of King and Yonge Sts., on which will be erected a bank building at an estimated cost of $800,000.

KAMLOOPS, B. C.—Plans are being prepared and bids will shortly be asked for the erection of a municipal hospital to cost $120,000.

MERRITT, B. C.—The Merritt Mercantile Co. has purchased a site and is having plans prepared for the erection of a departmental store to cost $40,000.

WINNIPEG, MAN.—Bids will be received by J. H. G. Russell, Sylvester-Willson Bldg., until 5 p. m., Feb. 14, for all labor and material necessary for the erection of a Y. M. C. A. building for North Winnipeg.

The city will at once call for bids for the construction of public baths to cost approximately $47,000. H. N. Ruttan is City Engr.

The contract for the construction of an 8-story brick and steel block for Gowans-Kent Western, Ltd., has been awarded to the CARTER-HALLS-ALDINGER CO., Chicago, Ill., and Winnipeg. Plans were prepared by James Chisholm & Son, Archs.

CALGARY, ALTA.—DOYLE & THOMAS, Lethbridge, Alta, have been awarded the contract for an apartment block here at $107,000.

Bids will be received until noon, Feb. 18, by Hodgson, Bates & Butler, Grain Exchange, Calgary, Alta., for the construction of an apartment block for Messrs. Beveridge Bros.

Bids will be received until 4 p. m., Feb. 18, by Alexander Pirie, Alberta Block, Arch., for the construction of an apartment block for O. G. Devenish.

The John Deere Plow Co. has purchased a site and is having plans prepared for a 3-story, brick and stone warehouse. Cost, $65,000.

DOYLE & THOMAS, Lethbridge, Alta., have been awarded the contract for the Colonel Walker School here at $100,000.

A hotel will be erected here by the Canadian Pacific Ry. Co. Estimated cost, $300,000. J. G. Sullivan is Asst. Ch. Engr.

EDMONTON, ALTA.—The ratepayers have endorsed a bylaw to raise $175,000, by the sale of bonds, for additional buildings for the exhibition grounds.

MEDICINE HAT, ALTA.—MORTON FULTON, Medicine Hat, has been awarded the contract for the erection of the Bank of Montreal Bldg. here. Hodgson, Bates & Butler, Calgary, Alta., are the Archs.

WATER SUPPLY—IRRIGATION.

(**Denotes that this work is advertised in Engineering News.*)

BUFFALO, N. Y.—Francis G. Ward, Comr. Pub. Wks., has recommended that the contract be awarded to the Westinghouse Machine Co. for three steam turbine electric generators for the new pumping station, at $248,180.

ELMIRA, N. Y.—Bids will be received until noon, Feb. 9, by the Susquehanna Ry., Light & Power Co., for constructing and reinforcing a concrete reservoir here. Address Purchasing Department, 40 Wall St., New York.

ENDICOTT, N. Y.—The Endicott Water Co., Endicott, is contemplating the construction of a reservoir on Cornell Hill, about ¼ mile northwest of the village. The capacity of the reservoir will be 1,500,000 gallons.

NEW YORK, N. Y.—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., Feb. 15, for hauling and laying an 8-in. pipe line, for making a connection to the 72-in. steel pipe, and for constructing a concrete weir chamber at Unqua Pond, Long Island; and for furnishing and erecting an iron fence and a concrete retaining wall at the East New York repair yard, Boro. Brooklyn.

*OGDENSBURG, N. Y.—Bids will be received by the Board of Water Commissioners until noon, March 7, for the construction of covered sand filters, pipe lines, steam and electrical pumping machinery, water turbine, electrical equipment, boilers, and other appurtenances.

Plans may be seen, and copies of the specifications, proposal, bond and contract obtained at the office of the Commissioners, or at the office of Hazen & Whipple, Consult. Engrs., 103 Park Ave., New York.

BOYERTOWN, PA.—The contract has been awarded by the Borough Council to WILLAUER & CO., of Pottstown, Pa., for digging a tunnel in which pipes will be laid to carry water from a well to the borough reservoir.

BRISTOL, PA.—Plans and specifications were received on Jan. 30 by the Borough Council for the construction of a complete municipal water-works, sewer and filtration system. Estimated cost, $165,000.

SPRINGDALE, PA.—The Borough Council is arranging for the construction of a water-works system. This item was erroneously noted on Feb. 2 under Springfield, Pa.

CUMBERLAND, MD.—James H. Fuertes, Consult. Engr., 140 Nassau St., New York, has about completed his report on the city water supply. The engineer will recommend the Savage River as the best source of supply. The plans will include the construction of a filtration plant, to cost $42,000. Estimated total cost, $500,000.

LURAY, VA.—The town, on Feb. 4, voted to spend $10,000 for an additional water supply. The 40,000-gallon daily supply will be increased to 130,000 gallons.

CLARKSBURG, W. VA. — The city will build two additional storage dams in the spring, to have a capacity of 100,000,000 gallons.

CHARLESTON, S. C. — Rudolph Hering, Consult. Engr., 170 Broadway, has been engaged by the city to investigate the construction of a water-works system and prepare estimates of cost.

ATLANTA, GA.—The contract has been awarded to the GENERAL PIPE & FOUNDRY CO., of Atlanta, by the city for furnishing the water department with pipe during the year, at $25,000.

DALTON, GA.—The city will receive bids until Feb. 23 for furnishing material and making extension to the water-works and electric light plant. H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., is in charge of the engineering work.

DOERUN, GA.—The city will receive bids until Feb. 15 for the construction of water-works. Estimated cost, $6,500. James L. Dowling is Mayor.

CAMBRIDGE, OHIO. — The State Board of Health, Columbus, on Jan. 26, ordered the city of Cambridge to install a purification plant for its water-works system.

EUCLID, OHIO.—Bids will be received until noon, Feb. 27, by Fred H. Schoaff, Village Clk., for the improvement of Montclaire Road, from Euclid Ave. to the northerly end thereof, by constructing a 6-in. water main. The F. A. Pease Engineering Co., Williamson Bldg., Cleveland, is Engr.-in-Charge.

NOTTINGHAM, OHIO.—Bids will be received by J. C. Steinicke, Village Clk., until noon, Feb. 17, for furnishing the necessary labor and material for the construction of water mains in Poplar St., from Marshall Ave. to Stevens Ave., Gilbert Ave., from Olive St. to Dille Road; Lamb Ave., from Kirkwood St. to St. Clair St.; Marshall Ave., from Kirkwood St. to St. Clair St; Dille Road, from St. Clair St. to southerly corporation line; Dille Road, from Sackett St. to Lake Shore Boulevard; Dille Road, from Gardner Road to St. Clair St.; Dille Road, from Sackett Ave. to Gardner Road; Olive St., from Gilbert Ave. to Moses Ave.; Porter Court, from Dille Road to east end Moses Ave., from Sackett Ave. to Dille Road, in accordance with the form of contract, plans and specifications on file at the office of the Clerk and at the office of J. B. Davis & Son, Engrs., 207 The Arcade, Cleveland, Ohio.

SANDUSKY, OHIO.—Bids [illegible] until Feb. 14 by John Bing[illegible] for furnishing and deliver[illegible] of 6, 8, 10 and 12-in. c.-i. [illegible] meters; and 300 tons of fi[illegible] [illegible] be received [illegible] Dir. Pub. Ser. [illegible] 8,000 lin. ft. [illegible]; 700 water [illegible] alum.

TOLEDO, OHIO.—William [illegible] Clark, 1048-1050 The Spitzer, Toledo, h[illegible] been appointed consulting engineer for the [illegible] construction of an extension to the present [illegible] ration plant. Bids are asked until Feb. [illegible] Noted on Jan. 19.

YOUNGSTOWN, OHIO.—The [illegible] Board of Control has awarded contracts [illegible] follows for various water-works supplie[illegible] for fire hydrants, to R. D. WOOD & CO [illegible] $24 each; water meters, to H. R. W[illegible] THINGTON, New York, at $6.60 each; va[illegible] to DARLING VALVE CO., at $10.40 [illegible] valves boxes, to MOZAN MFG. CO., [illegible] Ill., at $2.75 each; corporation cocks, [illegible] MONARCH CO., Cleveland, at 55 cts. each; 1,200 curb boxes, to FARNAM BRASS W[illegible] KS, Cleveland, at $2.65 each; for water [illegible] and specials, 600 tons of pipe and 20 [illegible] specials, to U. S. CAST IRON PIPE & FOUNDRY CO., at $21.70 per ton.

SOUTH BEND, IND.—The Water Works Board is preparing to ask for bids for the erection of a pumping station at Portage Park and for the installation of [illegible] and air-lift pumps.

DETROIT, MICH.—Smith, [illegible]man & Grylls, Engrs., Washington Ar[illegible] Detroit, have made a report recommending a high-pressure system of fire protection for Detroit. The Fire Commission has asked for an appropriation of $686,465 for the work, including $437,315 for a distributing system and $249,150 for a power plant and equipment. If the appropriation is allowed, four stations will be erected, one at the foot of Rivard St., one at the foot of Twelfth St., one at the foot of East Grand Boulevard, and one at the foot of West Grand Boulevard.

CHICAGO, ILL.—The Union Stock Yards & Transit Co., Chicago, John A. Spoor, Pres., has asked permission of the City Council to construct a high-pressure water system for the stock yards and vicinity.

The Finance Committee, on Jan. 27, voted an appropriation of $154,000 to enlarge the pitometer system of the Water Bureau. B. J. Mullaney is Comr. Pub. Wks.

We are officially advised that the U. S. Cast Iron Pipe & Foundry Co., 217 La Salle St., Chicago, was the only bidder, on Feb. 1, for furnishing and delivering on streets in the city approximately 2,300 tons of 36-in. pipe and 1,000 tons of 30-in. pipe, at $23.75 per ton. B. J. Mullaney is Comr. Pub. Wks.

JOLIET, ILL. — Two bids have been received, as follows, by the city for furnishing a deep well pump for the new artesian well west of the river: Hill-Trask Pump Co., Anderson, Ind., $5,985; Economy System Pneumatic Water Co., Chicago, Ill., $5,730.

CENTERVILLE, IOWA.—The Centerville Water Works Co. has decided to construct a reservoir. An option on 2,600 acres of land has been taken for the purpose.

*MARSHALLTOWN, IOWA.—Bids will be received until noon, Feb. 20, for the installation of machinery and water wheels at the new "dam." Plans and specifications are on file at the City Clerk's office. O. L. Ingledue is Mayor.

EVELETH, MINN.—The City Engineer has prepared plans and specifications for the construction of the proposed 16-in. water main from the railroad tracks to the St. Mary Lake pumping stations. Estimated cost, $14,000.

FERGUS FALLS, MINN.—Bids will be received until Feb. 20 by S. A. Levorsen, City Clk., for 1,200 ft. of 6-in. and 500 ft. of 4-in. c.-i. pipe and c.-i. T's, etc.

St. PAUL, MINN. — The Board of Water Commissioners, John Caulfield, Secy., awarded the contract, on Jan. 26, for furnishing 1,000 tons of c.-i. water pipe to the AMERICAN CAST IRON PIPE CO., Birmingham, Ala., at $23.15 per ton. The contract for special castings was let to the SOUTH PARK FOUNDRY & MACHINERY CO., at $4,000.

GORDON, NEB.—The citizens have voted in favor of issuing bonds for the construction of a water plant and an electric light plant.

WYMORE, NEB.—Bids will be received until Feb. 23 by the city for the construction of a water and electric light plant. Estimated cost, $57,000. Henry Hohl is City Engr.

BRIDGEWATER, S. DAK.—O. A. Rietz, City Audr., will receive bids until 8 p. m., Mar. 6, for the construction of a water tank and tower, 50,000-gallon capacity, 125 ft. high.

FLASHER, N. DAK.—C. F. De Lamere, Consult. Engr., Bismarck, N. Dak., is preparing plans and estimates of cost for the construction of a water-works system here.

HELENA, MONT.—Bids will be received, about April 20, by the city for the construction of water-works. Estimated cost, $60,000. W. Heimick is City Engr. Noted on Jan. 19.

LEWISTON, MONT. — A special election will be held here for the purpose of voting upon the proposition of issuing $100,000 of bonds for the constructon of a water system. Samuel Phillips is Mayor.

CHAFFEE, MO.—Bids will be received by the city until 8 p. m., Mar. 1, for the construction of a water supply system. H. [illegible] Hester is City Clk.; M. S. Murray, Sikeston, Mo., is Engr.

MARIONVILLE, MO.—A franchise to construct water-works and an electric light plant, it is reported, has been granted to the Lawrence County Water, Light & Cold Storage Co.

RUSK, TEX.—Another election has been ordered for Feb. 14 by the City Council to vote on the proposition of issuing bonds for the construction of a water-works system.

SANDERSON, TEX.—The town is considering the purchase of the local water-works system, with the view to making improvements and extensions.

TEMPLE, TEX.—The Board of Water Commissioners has adopted plans for the construction of a new filtration system, to cost $30,000, and have a daily capacity of about 2,000,000 gallons.

GUTHRIE, OKLA.—Bids were opened, on Jan. 19, by the city, for c.-i. water pipe standard bell and spigot. The contract has been awarded to the AMERICAN CAST IRON PIPE CO., of Birmingham, Ala., at the following prices: 1,600 ft. of 10-in., and 2,800 ft. of 12-in., at $25.20 per ton; and 4,000 ft. of 6-in. at $25.30 per ton.

BOULDER, COLO.—The City Council has approved and adopted the plans of Fred Dungan, City Engr., for the construction of a pipe line from Silver Lake to the present intake at the Boulder County ranch. The plans provide for 5.6 miles of 24-in. pipe, capable of carrying 21.2 cu. ft. of water per sec. It will follow the course of the bed of North Boulder Creek, through which the water now flows. Estimated cost, $152,458.

*FOWLER, COLO.—We are officially advised that all bids opened on Jan. 26 have been rejected by the Board of Directors of the Omer Irrigation District, Fowler, for the construction of a dam for Omer Reservoir No. 1, a diversion dam, headworks and sluice gates for the Omer Canal, and for the removal of about 100,000 cu. yds. of earth-work in the extension and enlargement of the canal, and for furnishing cement, valves, steel and other material necessary for the construction of the works. Two bids were submitted, as follows: Fox & Smith, $236,787; F. B. Arthur, cost plus 10%. Bids were opened on Jan. 26. The Field, Fellows & Hinderlide Engineering Co., 435 Century Bldg., Denver, Colo., is in charge of the engineering work.

ROSWELL, N. MEX.—M. D. Loomis is preparing to install four irrigation pumping plants upon his farm near here. The water will be pumped from wells, each lift being about 35 ft.

TUCUMCARI, N. MEX.—A syndicate of Chicago men is negotiating for the purchase of the water-works system and electric light plant of the Tucumcari Water & Light Co., at this place. If the deal is consummated the purchasers will make extensive improvements, it is stated.

CALDWELL, IDAHO.—The Gem Irrigation District has awarded the contract to F. W. SHEFFIELD, of Spokane, Wash., it is reported, for a pumping plant to pump water for irrigating 29,500 acres south of the Snake River, in Owyhee County, at $864,000. The power for this project will be generated at the Thousand Springs, and the electricity will be conveyed 120 miles to the point in Snake River, where the pumping plant will be installed.

OGDEN, UTAH.—Surveys were commenced on Jan. 24 for the new water conduit from Cold Water Canyon.

OGDEN, UTAH.—The Dinsdale Water Co. has been incorporated, with a capital stock of $15,000, to develop and operate a canal from Ogden River, running west to Marriotts, Weber County. Matthew Dinsdale is Pres.; J. G. Kihlstrom is Secy.

SALT LAKE CITY, UTAH.—The Secretary of the Interior has awarded a conditional contract to the JEFFREY MFG. CO., of Columbus, Ohio, for furnishing two electric locomotives for use in connection with the construction of the Strawberry Valley irrigation project, Utah. Only two bids were received, as follows: Westinghouse Electric & Mfg. Co., of Pittsburg, $1,690 each; Jeffrey Mfg. Co., $1,535, with an alternative bid for locomotives of a slightly different type, at $1,550.

SPOKANE, WASH.—The city, on Jan. 25, awarded a contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a new unit for the up-river pumping station, to be installed by April 1. Estimated cost, $12,000.

SPOKANE, WASH.—See item under Buildings.

TACOMA, WASH.—The Council has passed an ordinance providing for the construction of a 6-in. iron water main in Local Improvement District No. 568, according to the plans filed in the office of Nicholas Lawson, Comr. of Light and Water.

GRESHAM, ORE.—We are officially advised that Louis C. Kelsey, Consult. Engr., Selling Bldg., Portland, Ore., has recommended the construction of a gravity water-works system for the city. Estimated cost, $22,913.

HOOD RIVER, ORE.—We are officially advised that the vote to issue $38,900 of bonds to purchase the present water system resulted negatively. An issue of $90,000 of water bonds to build a municipal plant will probably be voted upon again. H. R. Langille is City Recdr.

PORTLAND, ORE.—The contract has been awarded to the DUNHAM CARRIGAN & HAYDEN CO., San Francisco, Cal., for furnishing and delivering at Portland, gate valves at $12,332. The contract includes the following: 20 4-in., 350 6-in. and 250 8-in. valves, 15 10-in. valves to operate horizontally with bevel gear and indicators; one 32-in. valve to operate horizontally with bevel gear and indicator; one 52-in. valve, to operate horizontally with bevel gear and indicator. Bids were opened on Jan. 10. D. D. Clark is Engr. Water Bd.

LONGBEACH, CAL.—The contract for the construction of a reinforced concrete reservoir on Signal Hill, for the Alamitas Water Co., has been awarded to EDWIN RALPHS, Longbeach, at about $12,000. Capacity, 4,000,000 gallons.

ONTARIO, CAL.—Bids will be received until Feb. 14 by R. O. Breckenridge, Town Clk., for furnishing, f. o. b cars Ontario or Upland, pipe and specials, and for constructing a domestic water system. The work will include the laying of 150,000 ft. of pipe and specials, mostly 1, 6 and 8-in. w.-i. pipe and 8, 10 and 14-in. riveted steel mains. This is a postponement from Jan. 25. Noted on Jan. 19. F. E. Trask is Consult. Engr., 421 Homer Laughlin Bldg., Los Angeles.

REDLANDS, CAL.—The Crafton Heights Pipe Line Co., of Redlands, will spend $16,250, it is reported, for a pipe line to extend from Mill Creek Canyon to Crafton Hills. The work will also include the construction of ditches and irrigation works.

RAPIDE DE L'ORIGINAL, QUE.—Bids will be received until Feb. 20 by Anthime Dubreuil, Mayor, for constructing a water supply for the municipality. Belque & Charlton are Engrs., 502 Quebec Bank Bldg., Montreal, Que.

ST. THOMAS, ONT.—Bids addressed to George K. Crocker, Chn. Bd. Water Comrs., will be received until noon, Feb. 13, for constructing a clear water covered reservoir at the St. Thomas water-works. Plans and specifications may be seen at the City Engineer's office.

TORONTO, ONT.—C. H. Rust, City Engr., has recommended to the Board of Control the construction of a duplicate intake and 6-ft. steel conduit laid between the tunnel and the lake. Estimated cost, $465,000. Recommendations that portion of the work lying between the shore crib or filter pumping station should begin at once have also been made, as it would take two years to complete it. Estimated cost of this improvement, $245,000. Additional pumping mains are required to enable the supply pumped at the main station to be distributed to the various service mains, so that the pressure and supply might be kept up, at an estimated cost of $161,544. These mains are as follows: 36-in. main from the main pumping station to Front St., and along Front to Simcoe, $37,000; 36-in. main from Wellington St., along John St., Grange Ave. and Beverley St., to College, $70,000; 24-in. main on Sumach St., from Queen St. to Wellsley, $41,688; 12-in. main to feed North Rosedale, $5,829; a 12-in. main in Wilton, from River to Broadview Ave., $7,027.

BASSANO, ALTA.—The Canadian Pacific Ry. Co. has awarded a contract to JANSE McDONNELL & CO. for the excavation required for the construction of a large dam here. The concrete work has been awarded to WALKER FYSKE & CO. The dam will be used in connection with the company's irrigation system.

EDMONTON, ALTA.—The ratepayers have endorsed by-laws to provide $48,000 for extensions and additions to the water-works and sewerage systems.

VANCOUVER, B. C.—A bylaw to provide a further appropriation of $223,000 to the $400,000 previous voted for the new water-works system has been passed by the City Council.

VICTORIA, B. C.—Bids will be received by W. W. Northcote, City Pur. Agt., until 4 p. m., Mar. 3, for 250 4-in., 100 6-in., 10 12-in. double gate valves, and for 15 tons of best blue pig lead. Specifications may be obtained from the City Engineer.

SEWERS.

*(*Denotes that this work is advertised in Engineering News.)*

BRIDGEPORT, CONN.—Sewers will probably be constructed in various sections of the city. Bonds for $200,000 will be issued. Maurice F. McKenna is City Engr.

BUFFALO, N. Y.—The City Council has voted to construct 10-in. tile sewers in the following streets: Reiman St., between Longnecker and Ideal Sts.; in Prairie Ave., from Tonawanda St. to the south end of Prairie Ave.; in the west side of South Ogden st., from Clinton St. south; also a stone and brick sewer, 5½ × 9 ft., in Lang Ave. and in Texas Ave., between Bailey and East Delavan Aves. Bids will be asked for by the Commissioner of Public Works.

NEW HARTFORD, N. Y.—The Village Board has adopted a resolution providing for the construction of a sewerage system and disposal plant here. Plans have been prepared by A. M. Scripture, Consult. Engr., New Hartford.

NEW YORK, N. Y.—Bids will be received until 11 a. m., Feb. 16, by Cyrus C. Miller, Pres. Boro. The Bronx, for constructing a receiving basin and appurtenances in East 204th St., North Side, at the approach to the Grand Boulevard and Concourse at Valentine Ave.; for a receiving basin and appurtenances at the northwest corner of Randall Ave. and Tiffany St.; for receiving basins and appurtenances at the northwest corner of Inwood Ave. and Macombs Road, and at the northeast corner of Inwood Ave. and West 172d St.; for a sewer and appurtenances in Walton Ave., from East 168th St. to East 167th St.; for constructing a sewer and appurtenances in East 180th St., between Anthony Ave. and the Grand Boulevard and Concourse; for constructing a sewer and appurtenances in Concord Ave., between 147th St. and 149th St.; for constructing a temporary sewer and appurtenances in Cruger Ave., from a point 128 ft. north of Bartholdi St. to a point 225 ft. north of Bartholdi St.; for constructing a sewer and appurtenances in West 234th St., between Broadway and Kingsbridge Ave., and in Kingsbridge Ave., between West 234th St. and West 232d St.

The Local Boards of the Borough of Queens have authorized an expenditure of $1,028,800 for various improvements, including important street openings and sewer construction; also the erection of a pumping plant at the intersection of Oak St. and West Ave., estimated cost, $9,750; the construction of the connecting line from the present terminus of the Ingleside trunk sewer with a screening plant at Flushing Creek, near Myrtle Ave., estimated cost, $87,302; rebuilding of sewers in one of the old sections of Flushing; the cost is $215,324; the drainage of the old Kiljordan section of Flushing by the construction of sewers. The cost is $64,000.

The following connecting and lateral sewers were approved: In Laburnum Ave., from Jamaica to Parsons Aves.; in Parsons Ave., from Laburnum to Queens; in Queens, from Parsons to 24th St.; in 17th St., from Queens to Cypress Aves., at a cost of $59,418; a storm water sewer in Amity St., from Lawrence St. to Flushing Creek, at an estimated cost of $120,130; sewer in Parsons Ave., from Oak St. to Queens Ave.; cost, $11,500.

ROME, N. Y.—The City Council has authorized the preparation of plans for a sewage disposal plant by Rudolph Hering, Consult. Engr., 170 Broadway, New York.

*WATERTOWN, N. Y.—Bids will be received until 8 p. m., March 3, by the Board of Public Works for the construction of a sanitary trunk sewer in the Second Ward (formerly the First Ward), from Black River to Huntington St., through Huntington St., from Clinton Ave. to Indiana Ave., through Indiana Ave. to Gill St., through Gill St. to Colorado Ave., and through Michigan Ave. to State St., and for a 10-in. sanitary sewer in State St., from California Ave. to Wyoming Ave. There will be required about 1,800 ft. 20-in. tile sewer; about 300 ft. 18-in. tile sewer; about 300 ft. 15-in. tile sewer; about 1,200 ft. 12-in. tile sewer; about 1,200 ft. 10-in. tile sewer. Plans and specifications may be obtained from E. W. Sayles, City Engr.

ATLANTIC HIGHLANDS, N. J.—The construction of a sewerage system and disposal plant is being considered by the citizens. Estimated cost, about $50,000.

BEVERLY, N. J.—According to press reports the Council has appointed a committee to ascertain the cost and secure specifications for the construction of a sewerage system here.

WILLIAMSPORT, PA.—Plans have been prepared for the construction of sewers in Williamsport. Bids will be asked soon.

BALTIMORE, MD.—Bids will be received until 11 a. m., Feb. 23, by the Board of Awards for constructing trunk sewers in Pratt, Green, Baltimore and Pearl Sts. There will be required about 44 lin. ft. 30-in. brick and concrete sewer, 5,050 lin. ft. terra cotta pipe sewer, 12-in. to 24-in., 3,800 lin. ft. 6-in. house connections and standpipes, 4,100 lin. ft. excavation in tunnel. J. Barry Mahool is Pres. Bd.

BALTIMORE, MD.—Ordinances are being prepared to be submitted to the City Council providing for a $10,000,000 sewerage loan. An election will probably be held in spring. B. T. Fendall is City Engr.

BALTIMORE, MD.—Calvin W. Hendrick, Ch. Engr. Sewerage Commission, American Bldg., will soon awarded contract for construction of sewer under the Baltimore & Ohio R. R. tunnel from near Camden Station to northern section of city. Estimated cost, $60,000.

*CHARLESTON, S. C.—Bids will be received until noon, Feb. 20, by J. H. Dingle, City Engr., for the construction of pump pits and appurtenances for the sewerage system.

SPARTANBURG, S. C.—The citizens here will petition the legislature for authority to issue bonds to the amount of $50,000 for the construction of a sewer system.

TIMMONSVILLE, S. C.—The contract has been awarded to ABEE & HART, Hickory, N. C., for the construction of 3,250 ft. of 30-in. T. C. sewer, 1,000 ft. of 24-in. T. C. sewer, 1,550 ft. of 18-in. T. C. sewer, 500 ft. of 12-in. T. C. sewer, 2,050 ft. of 12-in. T. C. sewer, 20 4-ft. manholes, 16 catch basins, three auto. flush tanks and siphons. J. N. Johnston, Florence, S. C., is Engr.-in-Charge.

DONALDSONVILLE, LA.—The city is contemplating constructing a sewer system here. An engineer will be employed to estimate the cost.

NEW IBERIA, LA.—The citizens of this place are considering the construction of a sewer system.

ADA, OHIO.—The installation of a sewage disposal plant has been ordered by the Ohio State Board of Health which directs the municipality to dispose of its sewage other than to turn it into Hog Creek.

BUCYRUS, OHIO.—The City Council has resolved to construct sewers as follows: Beginning in Mary St., at the west abutment of the bridge over the Sandusky River, thence running west on Mary St. to Crawford St.; also beginning at the intersection of Mary St. and Sears St., thence running north on Sears St. to Hill St.; also beginning at the intersection of Perry St. and Sears St., thence running west in Perry St. to Myers St., thence north in Myers St. to Hill St.; also beginning at the intersection of Perry St. and Sears St., thence running east on Perry St. to Jump St. John Gebhardt is Pres. of the Council.

CANTON, OHIO.—An ordinance has been adopted by the City Councils providing for the construction of a sewer in Fulton St., from a point 207 ft. north of Chance Ave. north to the corporation line. J. F. Bachman is Pres. of the Council.

CLEVELAND, OHIO.—A resolution has been passed authorizing the construction of a sewer in Potomac Ave., from Duck Creek Ave. to Ivy Ave.; Grigg Ave., from Belmont Ave. to Potomac Ave.; Ivy Ave., from Vista to Holly Ave.; Holly Ave., from Ivy Ave. to Vista.; 430 ft. south from Holly Ave. to point 680 ft. south of Holly Ave., and Batton, from Vista to point 430 ft. east. Edwin Kenderson is Clk.

Bids will be received until Feb. 10 by A. B. Lea, Dir. Pub. Ser., for the construction of sewers in Barberton and Denison Aves. and various streets.

DANVILLE, IND.—The construction of a system of sanitary sewers is being considered by the people here. Estimated cost, about $25,000. G. R. Brown, Indianapolis, is interested.

DELAWARE, OHIO.—Resolutions have been adopted by the City Council declaring it necessary to construct a sanitary sewer in Blymyer St., from Fountain Ave. to Lincoln Ave. and from East Lincoln Ave. to Union St.

ELYRIA, OHIO.—The contract for completing the unfinished Northeast sewer district which was abandoned by A. P. Southworth, contractor, of Adrian, Mich., has been awarded to S. MENDELSON, Elyria, at $23,569. There were three other bidders for the contract.

RICHMOND, IND.—Bids will be received until Feb. 13 by the city for the installation of 4,200 ft. of sewer from 12 to 42-in.; also for a sewer 1,300 ft. long. Fred. R. Charles is City Engr.

ALLEDO, ILL.—Bids were received as follows by the Board of Local Improvements on Jan. 19, for the construction of a sewer requiring about 3,200 ft. of 10-in. pipe, 4,120 ft. of 8-in. and 8,460 ft. of 6-in. pipe, 51 manholes and eight flush tanks: Prunger & Fletcher, $10,918; Illinois Good Roads Co., $10,120; W. H. Merrifield, $10,216; Independent Construction Co., $10,369; F. E. Kaminski, $10,[illegible]; E. M. Schetlow, $10,937; LANYON & CLIFFORD, $9,896 (awarded contract). W. S. Shields Co., 1201 Hartford Bldg., Chicago, Ill., are Engrs.-in-Charge.

CHICAGO, ILL.—The city proposes to expend about $470,000 for the construction of sewers. One sewer will be built in South Albany Ave., from the river to West 30th St., to cost $470,000, and the second will traverse the district between South Central Park Ave. and South 40th Ave., between West Madison and West 26th Sts., and is to cost $300,000. B. J. Mullaney is Comr. Pub. Wks.

MILWAUKEE, WIS.—The Special Sewerage Commission, employed by the Common Council, will make its report about Feb. 15. The members are: George C. Whipple, 103 Park Ave., New York; Harrison P. Eddy, Boston, and J. W. Alvord, Chicago. It is expected that recommendations will be made for the construction of a septic tank system. Chas. J. Poetsch is City Engr.; H. E. Briggs is Comr. Pub. Wks.

PORT WASHINGTON, WIS.—The city will probably be bonded to the amount of $35,000 for the purpose of constructing a sewerage system here.

INDIANOLA, IOWA.—The city has voted to install, during the coming summer, between four and five miles of sewers, at an estimated cost of $40,000.

MELROSE, MINN.—Bids will be received until Feb. 21 by F. J. Weisser, City Clk., for the construction of a sewer system here. Samuel S. Chute, St. Cloud, is Engr.

GARDEN CITY, KAN.—The City Council has submitted a report favoring the construction of a sewerage system here. The report has been approved.

ST. LOUIS, MO.—Bids will be received until Feb. 17 by Board of Public Improvements for constructing sewers in the Baden Sewer District. W. B. Dryden is Secy. Bd.

ST. LOUIS, MO.—Bids will be received until noon, Feb. 14, by the Board of Public Improvements for construction of Section 1 of the Forest Park foul-water sewer. Estimated cost is $20,000. Also Section 2 cost $23,000, and Section 3 cost $20,000, and for the work of equipping the pumping plant, including constructing well-deck and motor house on pump well and the furnishing and installing duplicate sets of direct-connected, centrifugal pumps and motors, with valves, pipes, wires switches, and appurtenances, necessary for the efficient working of the motors and pumps. Estimated cost, $7,000. Maxime Reber is Pres.

*CLINTON, OKLA.—Bids will be received until 8 p. m., Feb. 21, by C. G. Welch, Mayor, for the construction of 26,200 ft. of 8-in. lateral sewers of the first quality vitrified pipe, together with manholes, lampholes and other appurtenances. C. C. Smith is City Clk.

SPARKS, NEV.—Louis C. Kelsey, Consult. Engr., 204 Dooley Bldg., Salt Lake City, Utah, has recommended the reconstruction of the sanitary sewerage system at Sparks. The Mayor and City Council have adopted the report. Bonds will be issued, when bids will be asked for construction. The estimated cost is about $33,476. W. J. Stinson is Mayor.

GRESHAM, ORE.—The construction of a sanitary sewer system has been recommended by Louis C. Kelsey, Consult. Engr., Selling Bldg., Portland. Estimated cost, about $23,503. Lewis Shattuck is Mayor.

HILLSBORO, ORE.—See item under Streets and Roads.

LOS ANGELES, CAL.—The city has passed an ordinance of intention for constructing sewers in portions of the following streets: Wilshire Boulevard, Witton Pl., Gramercy Pl., St. Andrews Pl., Manhattan Pl., Western Ave., Oxford Ave., Cahuenga St., Hobart Boulevard, Kingsley Drive, Ardmon Ave., Browne Ave., Morton Ave., and Van Ness Ave., and for constructing sidewalks on Naomi Ave., Hartford Ave. and Angelica Ave.

LOS ANGELES, CAL.—The city has ordered the paving, with asphalt on concrete base, of San Pedro St., from Alisо St. to Fifth St., together with the construction of vitrified block and cement gutters, cement curbs and the following storm sewers: One 27-in. reinforced-concrete storm sewer with four manholes and six catch basins; one 24-in. vitrified pipe storm sewer with two manholes and six catch basins; one 16-in. vitrified storm sewer with one manhole and three catch basins. Bids for this work will be asked soon.

SAN FRANCISCO, CAL.—Bids will be received until 3 p. m., Feb. 15, by the Board of Public Works, David Hewes Bldg., 995 Market St., for the construction of sewers and appurtenances in San Bruno Ave., Oakdale Ave. and Rutledge St.

WILMINGTON, CAL.—The following bids were opened by the Board of Public Works for sewering Canal St. and other streets in Wilmington: F. R. Fulmis, $23,000 for sewer complete; Peter Gibovach, $19,[illegible]; Krist Radich, $21,970; John Balch, $24,000; Joseph Chutuk, $18,670; J. Zarubich, $16,350; W. N. Hendricks, $16,100; M. N. Miagenovich, $18,800.

EDMONTON, ALTA.—See item under Water Supply—Irrigation.

GARBAGE DISPOSAL.

*(*Denotes that this work is advertised in Engineering News.)*

FALL RIVER, MASS.—TIMOTHY E. REAGAN has been awarded the contract for the collection of garbage, for a term of five years at $44,400.

WATERBURY, CONN. — The Board of Health of this city, will receive bids, until Feb. 13, for the collection and disposal of the city's garbage for a period of one year. William H. Sandland is Clk. of the Bd.

COLUMBUS, OHIO.—An ordinance has been adopted by the City Council authorizing the municipality of Columbus to enter into a contract with the village of Grandview Heights, Franklin Township, for disposing of the village garbage.

STREETS AND ROADS.

*(*Denotes that this work is advertised in Engineering News.)*

MALDEN, MASS.—We are officially advised that the cost of paving Pleasant St. has been estimated at $20,000. Bids will probably soon be received. George W. Stiles is Supt. Paving; L. D. Holden is City Clk.

HARTFORD, CONN.—The following surveys have been made by the various division engineers and referred to the State Highway Commissioner: 11,800 lin. ft. on the road from Roxbury Center to Washington Green, in the Town of Roxbury; 3,000 lin. ft. on Peck Hill, in the Town of Morris; the Town of Chatham, 17,100 lin. ft. on the Marlboro-Portland Turnpike; 7,900 lin. ft. on Middletown Ave.; 2,500 lin. ft. on Sunset St.

NEW HAVEN, CONN.—Bids will be received by C. W. Kelly, City Engr., until Feb. 10, for grading Humphrey St., from Mill River St. to James St.

ALBANY, N. Y.—Bids will be received by Charles E. Treman, Supt. Pub. Wks., until noon, Feb. 27, for the construction of various highways around the Delta Reservoir in Oneida County. Estimated cost, $40,000. John A. Bensel is State Engr.

BUFFALO, N. Y. — The State Highway Commission has approved the plans for the Buffalo-Niagara Falls Boulevard. The route of the road as approved is from Williamsville north to Martinsville, west to the village of Bergliotz, and north to the city of Niagara Falls.

FORT NIAGARA (Youngstown post-office), N. Y.—Bids will be received by Lieut. E. H. Wagner, Constructing Q. M., U. S. A., until 11.15 a. m., Feb. 28, for constructing concrete walks, and macadamized and clay roads at Fort Niagara.

LANCASTER, N. Y.—Bonds for $43,600 have been issued for paving East Main St., West Main St., Aurora St., and Broadway. The paving of Central Ave., for the distance of one mile is contemplated.

*MINEOLA, N. Y.—The estimated quantities omitted in the proposal advertisement on page 64 of the Construction News Supplement last week, for county roads, bids to be received on Feb. 20 at Mineola, are as follows: 36,750 sq. yds. of macadam; 18,000 cu. yds. of excavation; 348 lin. ft. of 12-in. c. i. pipe; 60 cu. yds. of concrete; and materials for I-beam bridge. Attention is also called to the second, third and fourth paragraphs under the heading: "Bidders will state in writing and also in figures." For these should be substituted:

The price per sq. yd. for bituminous bonded macadam complete.

The price per lin. ft. for furnishing and laying to grade all cast iron pipe.

The price for furnishing all materials, in place, for an I-beam bridge.

The price for furnishing all the materials for a concrete arch bridge.

The price per cu. yd. for furnishing all other concrete.

NEW YORK, N. Y.—Bids will be received by Lawrence Gresser, Pres. Boro. of Queens, until 11 a. m., Feb. 20, for regulating, grading, laying sidewalks, curbing and paving various streets in the borough. Plans and specifications are on file at the office of the Borough President.

NEW YORK, N. Y.—Bids will be received by Cyrus C. Miller, Pres. Boro. The Bronx, until 11 a. m., Feb. 16, for paving, grading, curbing, regulating, laying sidewalks and building approaches on various streets in the borough. Plans and specifications are on file at the office of the Borough President.

TURTLE CREEK, PA.—Bids will be received by the city until noon, Feb. 15, for grading, curbing and paving portions of Stewart Ave., Brown Ave., Monroeville Ave., Osborne St. and Highland Ave. Plans and specifications are on file with Harrop, Hopkins & Taylor, Lewis Bldg., Pittsburg, Pa. Philip Jones is Chn. St. Com.

ANNAPOLIS, MD.—We are officially advised that Second, Madison, Washington and Clay Sts. will be paved with tar or asphalt macadam. J. C. Little is City Engr.

BALTIMORE, MD.—John M. Tucker, Chn. State Roads Comn., has been authorized to advertise for bids for the construction of the section of the Annapolis and Baltimore Boulevard between Arnold's Station and Glenburnie. The cost of this improvement is estimated at $300,000. B. T. Fendall is City Engr.

The contract for grading and paving with cobblestone, four streets in South Baltimore, has been awarded to the McLEAN CONTRACTING CO., Maryland Trust Bldg., Baltimore, at $14,900. The streets to be paved are Eutaw St., from Fremont Ave. to Henrietta St.; Hamburg St., from Howard to Sharp St.; Howard St., from Cross to Henrietta Sts., and Hamburg St., from Eutaw to Warner St.

NORFOLK, VA.—Bids will be received at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Feb. 11, for paving at the navy yard, Norfolk. Plans and specifications are on file with the Commandant of the Navy Yard. R. C. Hollyday is Ch. of Bureau.

NEWBERN, N. C.—Bids will be received by the city until 8 p. m., Feb. 28, for approximately 40,000 sq. yds. of paving. F. T. Patterson is City Clk.

COLUMBIA, S. C.—Bids will be received until Feb. 14 by the Commissioners of Richland County, for furnishing corrugated culverts in carload lots, to be used on the public highways. W. C. Thomas is Clk. Bd. Comrs.

JACKSONVILLE, FLA.—We are officially advised that several large paving contracts will soon be awarded. The estimated cost of the work is $300,000. G. D. Ackerly is City Clk.

JACKSON, MISS.—Bids will be received by Mayes Cooper, Highway Engr., until Mar. 9, for constructing county roads of gravel and sand-clay. Bonds for $100,000 have been sold.

AKRON, OHIO.—The County Commissioners, on Jan. 24, awarded the contract for the construction of Section 6 of the Akron-Hudson Road to PETERS & PALMER of Mansfield, Ohio, at $69,560. Bids were opened for this contract about a month ago and the bid of Peters & Palmer at that time was $77,917, which was the lowest bid. The estimated cost of the work as submitted by Joseph Gehres, County Surv., was $66,114. At the time the bids were opened the County Surveyor regarded the bid as excessive and requested that new bids be asked for. The commissioners, however, decided to award the contract to Peters & Palmer after they had reduced their bid $3,800, on an agreement to use bank gravel instead of wash gravel.

BOWLING GREEN, OHIO.—Bids will be received by William Manner, Dir. Pub. Ser., until noon, Feb. 20, for grading, draining, curbing, macadamizing and oiling Wallace Ave. from Grove St. to Haskins Road.

CINCINNATI, OHIO.—The following estimates have been prepared by the City Engineer for improving portions of two strets. Spring Grove Ave., from Ludlow Ave. to corporation line: Wood block, $112,487; granite, $124,225; bitulithic, with granite between the car tracks, $100,765; Eastern Ave., from present granite pavement to Archer St.; granite, $102,148; bitulithic, with wood block between the car tracks, $83,036; wood block, $95,045. F. N. Shipley is City Engr.

CINCINNATI, OHIO. — Bids will be received by the Department of Public Service until noon, Feb. 16, for improving Midland Ave., from Sunset to Rosemont Ave., by grading, setting cement combined curb and gutter, macadamizing the roadway with special binder and finishing course and constructing the necessary retaining walls. John J. Wenner is Clk.

Bids will be received by the Board of County Commissioners until noon, Feb. 24, for the improvement of Loveland and Madina Roads, from the corporation line of Loveland to the Miami River bridge. Fred Dreihs is Clk.

COLUMBUS, OHIO.—Bids will be received by F. M. Sayre, County Audr., until Feb. 23, for grading and graveling a portion of the Bixby Road, in Madison Township.

COLUMBUS, OHIO.—The city contemplates the construction of cement sidewalks on Perry St., from Fourth Ave. to Fifth Ave., Lexington Ave., from Spring St. to Mt. Vernon Ave.; Gill St., from High St., to Kerr St.; Linwood Ave., from Kossuth St., to Stanley Ave.; Lexington Ave., from Long St. to Spring St., 21st St., from Bryden Road to Rich St. Thomas Brannan is Supt. Paving.

LAKEWOOD, OHIO.—Bids will be received by B. M. Cook, Village Clk., until noon, Feb. 27, for paving Summit Ave., repairing the pavements on Alameda, Cohasset and Clarence Aves., and constructing a sewer main in Riverside Road, and a water main in Franklin Ave.

LISBON, OHIO.—Bids will be received by the Board of Commissioners of Columbiana County, until Feb. 25, for grading East Liverpool and Lisbon Roads.

SANDUSKY, OHIO.—Bids will be received by John Bing, Dir. Pub. Ser., until Feb. 15, for crushed stone to repair and macadamize streets, and for constructing stone and cement sidewalks and relaying old sidewalks.

SPRINGFIELD, OHIO.—Bids will be received until Feb. 15 for paving East High St. and macadamizing Belmont Ave. M. J. Bahin is City Engr.

YOUNGSTOWN, OHIO.—Bids will be received by W. H. McMillin, Dir. Pub. Ser., until noon, Feb. 16, for paving Griffith St., between Federal St. and Madison Ave. Plans and specifications are on file with the City Engineer.

ZANESVILLE, OHIO.—We are officially advised that bids will be received in April for 29,477 sq. yds. of brick paving, at an estimated cost of $41,672. Herbert Harris is City Engr.; L. R. McCaddon is City Clk.

BRAZIL, IND.—The Commissioners of Clay and Park Counties will soon award a contract for constructing a gravel road, 10,560 ft. long, on the county line.

COVINGTON, IND.—The contract for building the Fountain and Park Counties gravel road has been awarded to FRED. CUNNINGHAM, of Bloomfield, Ind., at $10,480.

FORT WAYNE, IND.—We are officially advised that the contract for constructing a macadam road in Maumi Township was awarded on Feb. 2, to WILLIAM WIEGMANN, at $5,497. C. H. Brown is County Audr.

HUNTINGTON, IND.—A contract for the construction of a gravel road, known as the Thomas Road, in Huntington County, has been awarded to HULSILL & WOLFEALE, of Markle, Ind., at $47,997.

INDIANAPOLIS, IND.—We are officially advised that the contract for improving Sanborn St., for which bids were received on Feb. 6, will be awarded to the MARION COUNTY CONSTRUCTION CO., C. A. Schrader is Pres., Dept. Pub. Wks. Noted on Jan. 26.

The Board of Public Works has received from the City Engineer plans for street improvements estimated at $264,325. Bids will be received for these improvements in a few weeks. Christian Shrader is Chn. Bd. Pub. Wks.

LAPORTE, IND.—The contract for the construction of a macadam road in Scipio Township has been awarded to JACOB ACKERMAN of Laporte, at $21,530.

MUNCIE, IND.—A contract for the construction of 10,560 ft. of brick road in Delaware county has been awarded to WILLIAM BIRCH, of Muncie, at $42,000.

TERRE HAUTE, IND.—The Commissioners of Vigo County have awarded a contract for the construction of the Howe gravel road in Sugar Creek Township to JAMES GLYNN, at $12,290.

VINCENNES, IND.—The County Commissioners have awarded a contract for the construction of the Williams gravel road in Vincennes Township, to WILLIAM BOBE, of Vincennes, at $9,200.

WABASH, IND.—The contract for the construction of two macadam roads in Wabash County has been awarded to GEORGE M. SEWELL, of Laketon, Ind., at $9,200.

WASHINGTON, IND.—The contract for constructing three miles of gravel road in Daviess County, has been awarded to M. H. WILSON, of Montgomery, Ind., at $10,201.

DETROIT, MICH.—The Common Council has ordered the Department of Public Works, J. J. Haarer, Comr., to advertise for bids for paving Willis Ave., from McDougal to Mt. Elliott Aves., 26 ft. wide, with cedar blocks, on concrete foundation, with Medina, Berea or any other approved curbing. The estimated cost is $16,468.

GRAND HAVEN, MICH.—We are officially advised that bids were received as follows, on Jan. 30, for improving Sheldon and Slayton Sts.: Herman Vanderverrn, Grand Rapids, Mich., $8,614; Markle Cement Construction Co., Muskegon, Mich., $10,371; D. C. Tabor, Muskegon, $10,450; McDermott & Cooper, Grand Rapids, $9,826; Anson Green, Grand Rapids, $8,907; Carpenter & Anderson, Grand Rapids, $11,005; C. Marsman, Grand Rapids, $9,355; Kanitz & Son, Muskegon, $10,058. The Riggs & Sherman Co., Toledo, Ohio, are Consult. Engrs.

CEDAR RAPIDS, IOWA.—We are officially advised that the contract for paving various streets with brick block, was awarded on Feb. 1, to M. FORD, Cedar Rapids, at $82,565. Dearborn & Jackson bid $85,748 for the work. L. J. Storey is City Clk.

CORNING, IOWA.—Bids will be received by W. C. Chubb, City Clk., until 8 p. m., Feb. 20, for paving, grading, and curbing various streets.

FORT MADISON, IOWA. — Bids will be received by the Board of Trustees of Green Bay Township, until Feb. 20, for road work. N. J. Huebner is Township Clk.

MANNING, IOWA.—Bids will be received by the Trustees of Lincoln Township, until Feb. 15, for road work. E. J. Peck is Township Clk.

MASON CITY, IOWA.—Bids will be received by J. H. McEwen, City Clk., until 7.30 p. m., Feb. 13, for 15,600 lin. ft. of cement curbing, and 32,800 sq. yds. of concrete paving. Estimated cost, $45,000. F. P. Wilson is City Engr.

CROOKSTON, MINN. — Bids will be received by A. M. Childs, City Clk., until Feb. 14 for paving with Westrumite asphalt macadam portions of several streets. The amount to be paved is 12,330 sq. yds.

KANSAS CITY, KAN.—We are officially advised that bids will be received at various times during the year for brick, asphalt, bitulithic, Hassam and macadam pavements. Estimated cost, $300,000. William Barcley is City Engr., J. E. Smyth, City Clk.

COLUMBIA, MO.—Bids will be received on Feb. 21, for constructing 11,750 sq. yds. of brick pavement. Estimated cost, $25,500. J. Russell Ellis is City Engr. J. S. Bicknell is City Clk.

ST. LOUIS, MO.—Contracts will be awarded on Feb. 21, by the Board of Public Improvements, for improving portions of Liberty St., Leffingwell Ave., Destrehan St., Clarence Ave., and other streets. Maxime Reber is Pres. Bd. Pub. Improvements.; Martin R. H. Witter is City Clk.

OKLAHOMA CITY, OKLA.—Bids will be received by Bob Parman, City Clk., until 5 p. m., Feb. 13, for paving with sheet asphalt Exchange Ave., from Pennsylvania to Kentucky Aves., and for grading portions of Markwell and College Sts., Ave. C, Broadway, Ave. F, Columbus Ave., and Shield's Boulevard. Plans and specifications are on file at the office of the City Clerk.

ADNA, WASH.—Bids will be received by the Board of County Commissioners, at Chehalis, until Feb. 20, for macadamizing about 16,000 lin. ft. of the A. J. White Road. H. H. Swofford is County Audr.

SEATTLE, WASH.—R. H. Thompson, City Engr., has submitted the following estimates for street improvements: 23d Ave., West., and other streets, grading and curbing, $64,000; Fifth Ave., paving, etc., $114,000; Lakeview Boulevard, paving, $45,940; Railroad Ave., filling and planking, $63,900; 12th Ave., paving, $75,300.

TACOMA, WASH.—Bids will soon be received for paving South Tacoma Boulevard and paving and extending Pacific Ave. Estimated cost, $500,000. Asphalt or some other hard surface pavement will be used. Owen Woods is Comr. of Pub. Wks.

WALLA WALLA, WASH.—The contract for constructing state aid road No. 99, has been awarded to the WILSON-HARDY CONSTRUCTION CO., of North Yakima, Wash., at $23,500.

HILLSBORO, ORE.—We are officially advised that Louis C. Kelsey, Selling Bldg., Portland, Ore., has been retained by the city to design and supervise the construction of street pavements and storm and sanitary sewerage systems.

HOOD RIVER, ORE.—Bids will soon be received for paving 15 blocks at an estimated cost of $100,000.

LOS ANGELES, CAL.—The City Engineer has been instructed to prepare plans and specifications for improving Blades and Seventh Sts. H. J. Leland is City Clk.

LOS ANGELES, CAL.—The contract for grading and graveling North Broadway, has been awarded to D. D. CHAPMAN, at $48,549.

POMONA, CAL.—The following bids have been received by the Board of City Trustees for paving and curbing Holt Ave.: Lewis Ferell, Pomona, 9¼ cts. per sq. ft.; Fairchild Gilmore Wilton Co., Los Angeles, Cal., 12½ cts. per sq. ft.; Hutson Shea Co., Riverside, Cal., 11 2-5 cts. per sq. ft. The work is estimated to cost $8,000.

RIVERSIDE, CAL.—Bids will be received until Feb. 14 by N. A. Jacobs, City Clk., for grading, macadamizing, oiling and constructing combination curb and gutter and g. c. corrugated culvert on Park Ave.

EDMONTON, ALTA.—The ratepayers have endorsed bylaws to provide $[illegible] for street paving this year.

MANUFACTURING PLANTS.

*(*Denotes that this work is advertised in Engineering News.)*

AUGUSTA, ME.—The Eastern Mausoleum Co. has been incorporated by S. Fay Carr, of Buffalo, N. Y., and associates, for the purpose of erecting a factory to manufacture and erect monuments, etc. The capital is said to be $10,000,000.

ADAMS, MASS.—The Berkshire Cotton Mfg. Co. will erect a 140,000-spindle mill. F. P. Sheldon & Co., of Providence, R. I., have drawn the plans.

CHELSEA, MASS.—A smelter steel plant is to be erected as soon as arrangements can be completed. It will cover about 20 acres on the water front and the estimated cost is $3,000,000. George S. Smith, Pres. of the Boston Chamber of Commerce, is interested.

HAVERHILL, MASS.—An 8-story factory is contemplated on Essex St. by Leslie K. Morse, it is reported. It will have a total floor space of 144,000 sq. ft., including the basement.

LYNN, MASS.—Contracts have been awarded by the General Electric Co. to STROUT BROS., of Lynn, to build a 3-story concrete addition, 12,500 sq. ft. in area, to the power plant, and a 2-story concrete annex, 10,000 sq. ft. in area, to factory No. 40 in this city. Work upon both buildings will be begun at once.

LYNN, MASS.—A cooperative shoe factory is to be built soon. Michael J. Tracy, Gen. Secy. of the United Shoe Workers of America, has charge of the work.

WESTFIELD, MASS.—The P. H. P. Motor Truck Co. plans to establish a factory to manufacture light automobile trucks, which were designed by E. R. Pendleton. Arrangements are being made for the construction work.

WOONSOCKET, R. I.—The Woonsocket Machine & Press Co. has awarded the contract for erecting an addition to its present plant on Second Ave. to the EASTERN CONSTRUCTION CO., of Woonsocket. Work will begin at once and it will be ready for occupancy in a few months. The addition will cover 50,000 sq. ft. and will include a 4-story structure, 83 × 100 ft., and a 1-story building, 125 × 105 ft. The mill will be directly behind the present building.

NEW BRITAIN, CONN.—Landers, Frary & Clark plan to erect a factory at Center and East Main Sts., to cost $105,000. A. W. Kempton is Asst. Secy. A permit has been granted.

NORWALK, CONN.—Charles L. Barker, of Norwalk, manufacturer of gasoline engines, will shortly build an addition to his Butler St. plant and manufacture the Murray auto truck, the design of Arthur T. Murray, of Norwalk, now connected with the Designing Department of the Lozier Motor Co. The trucks are for heavy business purposes and fitted to carry three tons each. The name of the concern will be changed from Barker Motor Works to the Barker Co. and it will continue the gasoline engine department as heretofore.

MOUNT CARMEL, CONN.—The plant of the Mount Carmel Trap Rock Co., at Mount Carmel, a few miles north of New Haven, which was destroyed by fire recently, will be rebuilt at once.

SAG HARBOR (L. I.), N. Y.—Joseph Fahys & Co., manufacturers of watch cases and silverware, contemplate constructing an addition to their plant on Washington St.

BUFFALO, N. Y.—The Mohn & Hunter Co., 266 East Genesee St., will build an extensive addition to its laundry plant at Cherry and Michigan Sts.

MIDDLETOWN, N. Y.—The New York, Ontario & Western Ry. Co. plans to erect a machine shop here. E. Canfield, of Middletown, is Gen. Supt.

UTICA, N. Y.—The Mott Wheel Works has increased its capital stock from $50,000 to $150,000 and is planning to extend its plant.

NEWARK, N. J.—We are officially advised that the contract to erect a 5-story factory, 37 × 70 ft., at 54 and 56 Ferry St., for the Rubber & Celluloid Harness Trimming Co., has been awarded to the D. & W. CONCRETE CO., of Paterson. It will be of brick and reinforced concrete. Fred A. Phelps, 9 Clinton St., Newark, is the Arch. Estimated cost, $16,000.

CLINTON, PA.—The Pittsburg, Shawmut & Northern R. R. Co. plans to construct repair shops and yards here. Several extensions will also be built to the line. B. C. Mulhern, of St. Marys, Pa., is Supt.

KOPPEL, PA.—The contract for the erection of the proposed buildings of the Oreystein-Arthur Koppel Co., portable and

dustrial railway manufacturers, at Koppel, has been let to the NICOLA BUILDING CO., of Pittsburg. Plans for the improvement were drawn at the annual meeting of directors and stockholders of the company in Berlin, Germany, last month. A. R. Reiche, Pres. of the American Company, whose offices are in Pittsburg, attended the meeting and secured approval of his plans for the improvements because of the remarkable increase in business here. Several buildings will be erected at the plant, and additions which covers a big acreage at Koppel, which is located several miles west of Beaver Falls, on the Pittsburg, Fort Wayne & Chicago and the Pittsburg & Lake Erie Railroads.

NEWVILLE, PA.—The Harrisburg Milk Products Co. plans to construct a milk condensing plant here. The material will be concrete and the plant will have a capacity of 40,000 lbs. daily. It will be three stories in height, 50 ft. long and 50 ft. wide, and located near the Newville station of the Cumberland Valley R. R. The company's Shippensburg plant is to be improved by the installation of two 180-HP. boilers. It has a capacity for condensing 30,000 lbs. of milk daily. At its annual meeting the company elected the following directors: A. A. Aughinbaugh, John Hosfeld, Christian Eshleman, J. S. Gingwake, of Shippensburg; Martin R. Nissley, of Harrisburg; Christian Nissley, of Florin, and Eli and John Reist, of Mount Joy. Mr. Aughinbaugh was elected Pres. and Martin R. Nissley, Treas. and Gen. Mgr. The headquarters of the company are located in Harrisburg.

PHILADELPHIA, PA.—The contract to erect a 2-story addition to the factory of the Reyburn Mfg. Co. at 23d St. and Allegheny Ave., has been awarded to CHARLES W. DENNY, 1330 Arch St., at $22,000.

BALTIMORE, MD.—The J. S. Young branch of the McAndrews-Forbes Co., Boston and Elliott Sts., has awarded contract to the D. M. ANDREWS CO., 26th St. and Mt. Vernon Ave., for constructing an addition to the plant. It will be a 2-story brick and concrete structure, with slag roof and plumbing. Plans were prepared by C. M. Anderson, 324 North Charles St., Baltimore. The factory will be a part of the American Tobacco Co. holdings in this city, and will manufacture licorice. Cost, $40,000.

CUMBERLAND, MD.—The Potomac Mould & Machine Co. has been organized to manufacture molds for glass factories. It will erect a 20 × 50-ft. frame building, iron covered. Two figure molds will be the weekly capacity in addition to snaps and paste molds.

EASTON, MD.—The Eastern Brick & Tile Mfg. Co. has been incorporated with $25,000 capital stock. Frank A. White is Pres. and Gen. Mgr.; Edwin G. Cover, Vice-Pres.; William Reddie, Secy. and Treas. It will build a brick plant and also make tile.

WHITE HALL, MD.—The White Hall Publishing Co. has been organized with Charles H. Wise, Pres.; William M. King, Vice-Pres.; John F. Wiley, Secy.; W. Evans Anderson, Treas., Mgr. and Editor. It will publish the Baltimore "County Press" and establish a job printing office.

LYNCHBURG, VA.—The Thornhill Wagon Works has completed plans for factory buildings, the main one of which will be one story high, with a floor space of 600 × 100 ft. It will be of mill construction and will be equipped with sprinkling devices. In addition to the main building, several smaller structures will be erected, giving the new plant twice the floor space of the burned factory.

STAUNTON, VA.—W. H. Sanford, of Zanesville, Ohio, will establish a factory with a capacity of 2,500 to 3,000 bbls. daily, it is reported.

WHEELING, W. VA.—The International Petrol Co. has been organized with a capital stock of $100,000 to build a plant for manufacturing gasoline from natural gas.

BIRMINGHAM, ALA.—The Veitsch-Mathews Engine Co., recently reorganized, it is reported, contemplates erecting a plant to manufacture turbo-rotary engines. The capital stock is $250,000. The officers are: I. A. Lewis, Pres.; George Veitsch, Sr., Vice-Pres.; E. L. Huey, Treas.; J. M. Lovett, Secy.; William A. Lovett, Fiscal Agt., 1203 Equitable Bldg.

MORGAN CITY, LA.—The plant of J. L. Pease Co., for the manufacture of built-up porch columns at this place, is to be enlarged, and the number of laborers increased from 75 to 300.

CHATTANOOGA, TENN.—We are officially advised that the contract to rebuild the 1-story foundry recently destroyed by fire, for the Ross-Meehan Foundry Co., has been awarded to L. S. MONDY, of Chattanooga. It will be 125 × 220 ft. and of brick and frame construction. Adams & Alsup, James Bldg., are the Archs. Cost, $20,000.

AKRON, OHIO.—G. A. Mueller, Breitmeyer Bldg., Detroit, Mich., is preparing plans for a 2-story and basement bottling works for the Akron Brewing Co., of Akron. The owners will purchase all materials and sublet all contracts. The building is to be 60 × 137 ft. and will cost $25,000.

AKRON, OHIO.—A 2-story steel and concrete structure is planned at Broadway and Market St., this city, for the "Beacon-Journal." The plant will be 52 × 110 ft. C. L. Knight is Mgr.

CANAL DOVER, OHIO.—It is reported that the Dover Forge & Iron Co. and the Reeves Mfg. Co. are to be merged. Three sheet mills will be added to the plant of the Forge Co., this product to be used by the Reeves plant, which makes stovepipe. The consolidated plants will give employment to about 350 men.

CLEVELAND, OHIO.—According to reports, the purchase of a tract of land on the Pennsylvania R. R. right-of-way between East 25th and East 55th Sts., has just been made by the Cleveland & Pittsburg Coal Co. A conveyor loading and unloading plant will be erected there. The price paid for the land was about $50,000. The present offices and yards of the company, at East 55th St. and the Pennsylvania, will be covered within a year by the proposed freight depot of the railroad. T. E. Rook, Mgr., will let contracts for the erection of the plant soon. The plans are nearing completion. Extensive yards, equipped with a modern conveying system, will be fed by an elevating unloading plant. The machinery will be so constructed that it will operate with the railroad at the present level or at the increased height that will be necessitated by grade crossing elimination during the present year. Motor truck coal wagons will be purchased by the company. A stable, with room for 70 horses, will be part of the plant.

COLUMBUS, OHIO.—Richards, McCarty & Bulford, Archs., The Ruggery, have awarded the contract for the erection of a factory for the Felber Biscuit Co. to FRANCIS BROS., 165½ North High St., Columbus, at $50,000. It will be of reinforced-concrete construction. Noted on Dec. 22.

HAMILTON, OHIO.—It is announced that the plant of the Carr Milling Co., which was recently destroyed by fire, will be rebuilt. W. B. Carr is Pres. Cost, $100,000.

SANDUSKY, OHIO.—A plant is contemplated here by the Gallup-Ruffing Co., manufacturers of implement handlers, to replace the one recently burned in Norwalk.

TOLEDO, OHIO.—Plans for the proposed bottling works for the Bavarian Brewing Co. were approved at the annual meeting of the stockholders of the concern held recently, it is stated. The building will be erected alongside the plant of the company on Superior St., near Washington. The structure is to be three stories high and will be of brick and concrete with asphalt floors. It will cost about $35,000. It is expected that the contract will be awarded soon and the work started in March. The stockholders reelected the old officers who are: Carl Huebner, Pres. and Gen. Mgr.; Harry Bayer, Vice-Pres.; A. W. Shields, Secy. and Treas.; George Eiben, Asst. Secy. and Treas; Walter Albrecht, Cashier; Joseph Herrmann, Brewmaster, and Directors, Harry Bayer, Jacob Koerner, George Eiben and A. W. Shields.

TOLEDO, OHIO.—The Interstate Stock Yards Co., of this city, has purchased 30 acres of land at the intersection of the Toledo Terminal and the Lake Shore, beyond the city limits, in East Toledo. The company was incorporated in July, 1910, with $25,000 capital which is to be increased to $30,000 for the expansion of the present yards and the erection of an abbatoir and reduction plant, according to reports.

DELPHI, IND.—The Wabash Pearl Button Co., recently incorporated, is preparing to establish and equip a factory to manufacture pearl buttons from mussel shells. William Donlin is Pres.

FT. WAYNE, IND.—The Siler-Pettitt Mfg. Co. has incorporated with a capital of $250,000, to establish and equip a plant for the manufacture of pumps, liquid storage and distributing systems. E. E. Siler, B. F. Pititt and G. S. Sanford are Dirs.

INDIANAPOLIS, IND.—H. H. Symmes, R. J. Espey and J. D. Williams will establish and equip a solid-tire factory in this city. A corporation is being organized, with a capital of $100,000.

WABASH, IND.—The Ford Meter Mfg. Co., of Wabash, has been incorporated to establish and equip a factory to manufacture water, gas and electric meters. E. H. Ford, T. W. and W. A. McNamee are the Dirs. The capital is $25,000.

DETROIT, MICH.—F. Gordon Pickell, Union Trust Bldg., Detroit, has let the general contract for the proposed plant of the Gray-Hawley Mfg. Co., 607 Fort St., West, to the A. J. SMITH CONSTRUCTION CO., Hammond Bldg. The plant is 30 × 88, and will be located on Jefferson Ave. Cost, $25,000. Noted on Jan. 26.

BAYFIELD, WIS.—The Kurz-Downey Box Co. will rebuild its box factory which was recently destroyed by fire. W. F. Kurz is Pres. The estimated cost is $40,000.

MILWAUKEE, WIS.—The Chemical Processes Co., recently incorporated with a capital of $100,000, will erect a plant to cost $75,000, a site for which is now being selected. The promoters are: Charles J. McIntosh, Stanley Hauxhurst and W. G. Scott, all of Milwaukee.

The Home Brewing Co., recently incorporated as a cooperative institution among saloonkeepers of Milwaukee and suburbs, has voted to erect its brewery within the next few months. Several sites are now under consideration. The capital subscribed up to this time is $146,000, divided among 146 saloonkeepers. This amount assures the erection of the plant.

REEDSVILLE, WIS.—The Wisconsin Canners Co. will establish two plants at Reedsville and Denmark, the equipment to be partly new and partly taken from the present plants at Sheboygan, Manitowoc and Two Rivers, Wis.

MISSOURI VALLEY, IOWA.—It is announced that the Chicago & Northwestern R. R. Co. will expend $400,000 to improve and better equip the machine shops at Missouri Valley in the near future. New and enlarged shop buildings and improved and large machinery to be installed. E. C. Carter, of Chicago, Ill., is Ch. Engr.

MOBERLY, MO.—The officers of the Metropolitan Paving Brick Co., Folwell Bldg., this city, has taken out new incorporation papers in Ohio for the Moberly Paving Brick Co., a branch plant located at Moberly, Mo., and increased the capital stock from $125,000 to $300,000. The increased capital stock is to take care of extensive improvements and future developments of the company, it has been announced. The incorporators in the Moberly plant are: C. W. Keplinger, A. P. Maurer, James G. Barbour, Austin Lynch and Urban A. Wernet.

ST. LOUIS, MO.—A lot, 25 × 115 ft., located at Glasgow Ave. and North Market St., has been purchased by H. N. Lincoln, of Dallas, Tex., for the purpose of erecting a factory to cost $50,000, it is stated.

The Busch-Sulzer Bros. Diesel Engine Co., of St. Louis, has been incorporated with a capital stock of $2,100,000, and will build a $1,000,000 plant for constructing internal combustion oil engines, under the Diesel patents. Adolphus Busch is Pres. of the Company. The other incorporators are: Charles D. Russell, Ned M. Scott, Hugo Friedrichs, Daniel N. Kirby, Gustav F. Decker, Frank S. Lyndall, Arthur B. Shepley, Max W. Lade and Van G. Hildebrand.

The Anchor real Estate Co., of which John C. Brinkmeyer is Pres., will erect a factory at 2344-48 Eugenia St., to be occupied by the Direct Cloth Mfg. Co. Estimated cost, $40,000.

BRYAN, TEX.—J. T. Lawler, of New Orleans, La., has taken preliminary steps towards erecting a flour mill of 250 bbls. daily capacity at this place. He contemplates installing an electric power and lighting plant in connection with the mill and has made a proposition to the City Council to sell the city his surplus power, it is reported.

HOUSTON, TEX.—George M. Dickson, Charles M. Reid and R. G. Duff, all of this place, are interested in the erection of a plant at Houston, to cost $200,000, for the manufacture of metallic hose, which is an invention of W. M. Schulze, also of Houston.

The Houston Brick & Tile Co., Carter Bldg., which was recently organized, will construct a modern brick and tile plant on the south side of the Houston ship channel. It will manufacture a concrete cement brick and tile, the latter to be used for drainage purposes. The plant will have a daily capacity of 55,000 brick and a large quantity of tile. The incorporators of the company are: C. A. Barbour, C. R. Miner and Sinclair Taliaferro, all of Houston; Milton McConnell, of Dallas, and Clement Watson, of New Waverly, Tex. The capital stock is $100,000.

LA FERIA, TEX.—The La Feria Sugar Co., which has its headquarters at Minneapolis, Minn., has had plans prepared for a $500,000 sugar mill to be erected at La Feria. J. C. Fifield, of Minneapolis, Pres. of the company, recently selected the site for the proposed mill, it is stated.

MARFA, TEX.—The Texas Candelilla Wax Co., which was recently organized with a capital stock of $25,000, will establish a factory at this place for the manufacture of high grade wax from the candelilla shrub, a desert plant that grows profusely in this part of the state. The incorporators of the new company are: F. S. Breeding, S. W. Wooley and W. P. Murphy.

VICTORIA, TEX.—The Victoria Safe & Lock Co. will erect two buildings and install machinery for the manufacture of safes at this place. The plant will have a capacity of about 2,000 safes a year. H. H. Stephenson is Mgr.

ARDMORE, OKLA.—It is reported that efforts are being made for the organization of a company to build a cotton factory at Ardmore, and the citizens have offered a site of 100 acres to manufacturers who contemplate building a plant. A meeting to further the movement was held recently and it was addressed by T. W. Garbutt of Fitzgerald, Ga., who will probably be active in the management of the proposed company. He is now president of the Fitzgerald Cotton Mills.

OKLAHOMA CITY, OKLA.—According to reports, the Sherman Machine & Iron Co., of Oklahoma City, will invest about $400,000 to erect buildings for foundry, machine shop, wood-working plant, storage warehouse, etc., replacing the present plant, and will organize the N. S. Sherman Warehouse Co., to build a 140 × 240-ft., 6-story fireproof warehouse at 18 to 36 Main St. The incorporators and exclusive stockholders in the warehouse company are: N. S. Sherman, Sr., N. S. Sherman, Jr., W. S. Sherman, N. V. Hope and R. V. Moran.

OKLAHOMA CITY, OKLA.—Organized to engage in the mining of coal and the manufacture of vitrified brick, the Quinton Coal & Brick Co., of Oklahoma City, capitalized at $600,000, has applied for papers of incorporation and a charter. Dr. J. M. Postelle and E. J. DeuPree, of Oklahoma City, and H. C. Jarretson, of Quinton, are the incorporators. The company will take over the holdings of the Quinton Coal Co., formerly owned by Mr. Jarretson, which holdings include a coal mine in operation and 6,000 acres of coal land, near Quinton, 28 miles northeast of McAlester, on the Fort Smith & Western R. R.

DELTA, COLO.—The Western Sugar & Land Co., controlled by J. R. McKinnie and associates, of Colorado Springs, plans to erect a sugar factory at Delta. It will have a daily capacity of 600 tons and will cost approximately $800,000. E. C. Sharer is Secy.

ROSALIA, WASH.—A flour mill is contemplated here by J. C. Hudson, of Tekoa, it is reported. It will have a capacity of 150 bbls. daily. H. M. Roberts, of Rosalia, is interested.

SEATTLE, WASH.—Bids are being received for the alteration and enlargement of the refrigerating plant in the Municipal Building. C. B. Bagley is Secy., Bd. Pub. Wks.

GASTON, ORE.—The Lovegren Lumber Co., of Portland, plans to establish manufacturing plants about five miles from Gaston in Patton Valley. The estimated cost, it is stated, is $1,000,000.

ALHAMBRA, CAL.—Contracts will soon be awarded by Aaron Hill, of Alhambra, for the erection of two 1-story factory buildings on El Monte road near Eastlake Park, to be used for the manufacture of metal beds and springs. They will be 200 × 75 ft. and 100 ft. square. Construction will be of corrugated iron with cement foundations and wood floors.

HIGHLAND, CAL.—The packing house of the West Highland Citrus Association, recently burned at a loss of $26,000, will be rebuilt at once. H. H. Jackson is Mgr.

LOS ANGELES, CAL.—The BARBER-BRADLEY CONSTRUCTION CO., 1824 East 15th St., will erect a 2-story brick building, 75 × 140 ft., on Tenth St., for the A. C. Stewart Auto Machine Works, to be used for manufacturing purposes.

LOS ANGELES, CAL.—H. Whitaker, 3802 North Griffin Ave., is preparing plans for a 3-story brick factory building, 70 × 200 ft., to be erected for the Los Angeles Can Co., on 28th Ave. It will be of heavy mill construction with a composition roof. Cost, $15,000 to $20,000.

PERRIS, CAL.—It is stated that a sugar beet factory, with a capacity of 500 tons, is to be erected near Perris in Riverside County by the Southwestern Sugar Co., of Los Angeles, recently organized with a capital of $1,000,000. The incorporators are W. E. Evans, R. S. Bulla, D. Howarth, M. B. Jones, etc. The plant will cost $500,000.

SAN BERNARDINO, CAL.—The capital stock of the Santa Fe Steam Laundry Co. has been increased from $12,500 to $50,000. Extensive enlargements of the capacity and equipment will be made. J. Miller and T. W. Duckworth are interested.

SANTA ANA, CAL.—The Peoples Steam Laundry Co. has been incorporated here for $25,000. A fireproof brick building covering two lots will be erected at once, and will be equipped with the latest machinery. Those interested are: J. M. Cain, C. J. Childs, C. A. Bassett and others.

OTTAWA, ONT.—The Canadian Steel Foundries, Ltd., has been incorporated, with a $5,000,000 capital, to take over the Montreal Steel Co. and Ontario Iron & Steel Co., it is announced.

TORONTO, ONT.—The Lake of the Woods Milling Co. has purchased a property of 100 ft. frontage with a depth of 120 ft. on Dupont St., and will build on it a mill which will cover the entire site.

The Canadian Northern R. R. has purchased 200 acres here and will erect roundhouses, for which plans are now being prepared. D. D. Mann, of Toronto, is Vice-Pres.

STRATHCONA, ALTA.—P. Burns & Co., meat packers, of Calgary, Alta., have purchased a site here and it has been announced they will erect a packing plant on it to cost approximately $1,500,000. The company also contemplates doubling the capacity of the present abbatoir in Vancouver, B. C., at a cost of $200,000.

SALTILLO, MEX.—The Zinc Smelter Co., of this place, will soon begin the erection of a zinc smelter here.

MISCELLANEOUS CONTRACTS.

*(*Denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

MOORING STONES.—Portland, Me.—Bids will be received until noon, Mar. 15, by the Lighthouse Inspector for furnishing mooring stones for use in the First Lighthouse District.

ORDNANCE STOREHOUSE.—Fort Constitution, N. H.—Bids will be received until 2 p. m., Feb. 25, by Lieut. John Mather, Constr. Q. M., U. S. A., for constructing an ordnance storehouse here.

BREAKWATER, ETC.—Barnstable, Mass.—The contract for the construction of a breakwater and sand catcher at the north end of the Cape Cod Canal, Barnstable Bay, Mass., has been awarded to the BREAKWATER CO. Estimated cost, $965,000. The amount of stone required for this work will be 600,000 tons, which will be supplied from the company's quarry at Rockport, Mass.

TUNNEL, ETC.—Boston, Mass.—The report of the Joint Board, known as the "Big Four," consisting of the Boston Transit Commission, the Metropolitan Park Commission, the State Harbor and Land Commission, and the State Railroad Commission, contains the following recommendations regarding municipal improvements: (1) That the New York, New Haven & Hartford R. R. Co. and the Boston & Maine R. R. Co. be permitted to construct a tunnel between the North and South Stations; (2) that the city build a surface highway between these same points, the two to be built simultaneously; (3) that a boulevard highway be built from Columbia Road, South Boston, to the Metropolitan Boulevard, in Quincy—about four miles; and (3) that a boulevard be built from Boston through Cambridge and Somerville to the parks west and north of Boston.

COAL UNLOADING AND STORAGE PLANT.—South Boston, Mass.—The Boston Elevated R. R. Co. has awarded a contract to the MEAD-MORRISON MFG. CO., 149 Broadway, New York, for installing complete coal unloading and storage plant for the new power-house at South Boston. The plant will include unloading towers of the latest design (one-man control), cable road and rehandling and pick-up bridge.

COAL HANDLING MACHINERY.—South Boston, Mass.—The contract has been awarded to the MEAD-MORRISON MFG. CO., 149 Broadway, New York, by the Edison Electric Illuminating Co., South Boston, for equipping its plant here with coal-handling machinery.

*REVOLVER RANGES, ETC.—Blauvelt, N. Y.—The following bids were received on Feb. 7 by the State Armory Commission for improvements at the Bauvelt rifle-range at Blauvelt: For revolver ranges, magazine, concrete guard wall, sidewalk and stops, from firing plane to existing butts of 200 yd. range; pump house and water supply work: Robert W. McCready, Tuxedo Park, N. Y., $18,500; Frank Beach, Troy, N. Y., $18,782; E. J. Doyle & Co., Albany, N. Y., $28,870; A. T. Essery, Blauvelt, $19,508; Peter Keeler Bldg. Co., Albany, $23,099; Richard Hopkins, Troy, $25,933. For property line fence: Peter Keeler Bldg. Co., Albany, $8,690; American Wire Form Co., New York, $8,900; Frank Besch, Troy, $9,100; Robert W. McCready, Tuxedo Park, $9,900; A. T. Essery, Blauvelt, $11,500. For steel back stops: Sharon Boiler Works, Sharon, Pa., $11,835; Frank Besch, Troy, $13,706; Peter Keeler Bldg. Co., Albany, $14,000;

A. T. Essery, Blauvelt, $16,740; Robert W. McCready, Tuxedo Park, $18,200. F. B. Ware is State Arch.

CHANNEL EXCAVATION.—Buffalo, N. Y.—Bids will be received by Lt.-Col. J. G. Warren, Corps Engrs., U. S. A., 540 Federal Bldg., Buffalo, until 11 a. m., Mar. 14, for channel excavation in Black Rock Harbor at Buffalo.

CHANNEL.—Flushing (L. I.), N. Y.—The War Department has recommended to Congress the improvement of Flushing Bay by locating a new channel. Estimated cost, $312,000, and $5,500 annually for maintenance.

ELIMINATION OF GRADE CROSSSINGS.—Jamestown, N. Y.—The Public Service Commission has ordered the elimination of three grade crossings of the Erie R. R. Co. in Jamestown, at a cost of $500,000, of which the railroad company will be required to pay one-half, the city one-quarter, and the State one-quarter.

HOOK AND LADDER TRUCKS.—New York, N. Y.—Contracts were awarded on Feb. 2 by R. Waldo, Fire Comr., to the WEBB MOTOR FIRE APPARATUS CO., of St. Louis, Mo., for two 75-ft. self-propelling hook and ladder trucks at $19,900; and two gasoline pumping engines at $16,500.

BROKEN STONE, ETC.—New York, N. Y.—Bids will be received until 11 a. m., Feb. 20, by Lawrence Gresser, Pres. Boro. of Queens, for furnishing and delivering to the Bureau of Highways, broken stone and screenings of trap rock; 3,000 cu. yds. of sand, and 240,000 gallons of asphalt road oil.

SHED, OIL HOUSE, ETC.—New York, N. Y.—The contract for the construction of a shed, oil house and fence has been awarded by George Cromwell, Pres. Boro. Richmond, to NORMAN & YOUNG, New Brighton (S. I.), N. Y. Bids were opened on Jan. 31.

ELEVATORS.—New York, N. Y.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded the contract, it is reported, to the OTIS ELEVATOR CO., 17 Battery Pl., New York, for installing elevators at the Assay Office, New York, at $14,762. Bidders noted on Jan. 12.

*DREDGING.—New York, N. Y.—The contract for dredging and rock removal in the Hudson River has been awarded by the War Department to MICHAEL J. DADY, Brooklyn, N. Y., at 33 cts. for shoal dredging and $3.21 per sq. yd. for rock. Total amount of contract, $281,000.

*FIRE ESCAPES.—White Plains, N. Y.—Bids will be received until 8 p. m., Feb. 21, by the Board of Education, Room 106, High School Bldg., for fire escapes on the high-school building. L. Stutts is Clk.

WHARVES.—Chester, Pa.—Plans and specifications have been completed by the city engineering department for the construction of two of the proposed new wharves provided under the terms of the loan bill which carried an aggregate appropriation of $55,000 to do the work. The plans for the improvement at Market St. and Edgmont Ave. are ready to be submitted to the bidders as soon as the necessary legislation is passed by Councils. For the Market St. pier, $30,000 is provided; $10,000 for Edgmont Ave. and $15,000 for a wharf at Reaney St.

*PIER.—Philadelphia, Pa.—The contract for the construction of the superstructure of the Vine St. pier has been awarded by the city to W. S. P. SHIELDS, Witherspoon Bldg., Philadelphia, at $339,000. Bids were opened on Jan. 20. Work has already begun.

BRICK, VITRIFIED BLOCK.—Baltimore, Md.—Bids will be received until 11 a. m., Feb. 15, by the City Register, addressed to the Board of Awards, for furnishing brick or vitrified block for the public parks and squares.

PIER.—Baltimore, Md.—Oscar F. Lackay, Harbor Engr., has submitted plans to Board of Estimates for the construction of the proposed recreation pier at the foot of Broadway, to be 55 × 150 ft.; two decks. Estimated cost, $350,000 to $375,000.

TORPEDO BOATS.—Washington, D. C.—Bids will be received until noon, Mar. 14, by the Navy Department, Washington, for constructing four torpedo boats. This is an extension of date from Feb. 6. Beekman Winthrop is Acting Secy.

MEMORIAL ARCH.—Washington, D. C.—Army engineers, detailed to examine plans for the proposed memorial arch on the campground of Valley Forge, authorized by a bill passed at the last session of Congress, have reported to the Secretary of War approving the plans and stating that the $100,000 fixed as the limit of cost will be required for its construction, and can be used in the next year.

RIVER AND HARBOR WORK.—Washington, D. C.—The River and Harbor Bill, providing for the appropriation of $36,000,000 for river and harbor improvements, was passed by the Senate on Jan. 31.

BRASS, COPPER, ETC.—Washington, D. C.—Bids will be received until Feb. 14 by the Bureau Supplies and Accounts, Navy Dept., Washington, for furnishing at the navy yards and naval stations the following supplies: Norfolk, Va.—Schedule 3301, galvanized steel angles and channels; Schedule 3302, 1,280 lbs. sheet brass and copper. Washington.—Schedule 3300, 25,000 lbs. manganese bronze, miscellaneous steel forgings, six hydraulic operating valves. Brooklyn, N. Y.—Schedule 3298, 50,000 ft. lighting portable cable, 38,000 ft. duplex, r.-i. conductor, 15,000 ft. double-braided conductor, 30,000 ft. silk-covered lamp cord, 10,000 ft. duplex telephone wire. Applications for proposals should designate the schedules desired by number.

ROOF AND CRANE RUNWAY.—Norfolk, Va.—Bids were received as follows on Feb. 4, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a new roof and crane runway for building No. 23 at the Norfolk Navy Yard: R. H. Richardson & Son, Hampton, Va., $42,973; J. H. Pierce, Norfolk, Va., $44,081; Alsop & Pierce, Newport News, Va., $58,350; Gregory & Williamson, Norfolk, $53,003; J. W. Davis, Newport News, $49,771; Snare & Triest Co., 43 Liberty St., New York, $44,950; Penn Bridge Co., Washington, D. C., $56,400; Richardson Construction Co., Inc., Norfolk, $52,442; Baltimore Bridge Co., Baltimore, Md., $48,420.

ELECTRIC CRANE.—Norfolk, Va.—Bids were received as follows, on Feb. 4, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing one 60-ton electric traveling crane in building No. 23, Norfolk Navy Yard: Manning, Maxwell & Moore, Inc., 85 Liberty St., New York, Item (1), crane, complete, $15,088; (2) omitting two auxiliary hoists, $12,488; (3) omitting one auxiliary hoist, $13,788. Whiting Foundry Equipment Co., Harvey, Ill., (1) $14,345; (2) $11,825; (3) $13,085. Cleveland Crane & Engineering Co., Wickliffe, Ohio, (1) $13,895, $12,450; (2) $11,985; (3) $12,985. Niles-Bement-Pond Co., 111 Broadway, New York, (1) $11,965, $10,775; (2) $9,540, $8,515; (3) $10,770, $9,645. Alfred Box & Co., Front and Poplar Sts., Philadelphia, Pa., (1) $14,499; (2) $12,425; (3) $13,222, $12,500. Morgan Engineering Co., Alliance, Ohio, (1) $14,880; (2) $12,695; (3) $13,790. Baltimore Bridge Co., Bush and Wicomico Sts., Baltimore, Md., (1) $11,911, $10,881; (2) $9,882, $8,799; (3) $10,240, $9,795.

COLD-STORAGE PLANT.—Richmond, Va. The city is considering the installation of a cold-storage plant. Estimated cost, $10,000. F. L. Gibboney is City Engr.

TUNNEL WORK.—Birmingham, Ala.—The Seaboard Air Line Ry. Co. will concrete the Divide Tunnel. Estimated cost, $25,000. W. L. Seddon is Ch. Engr., Portsmouth, Va.

LEVEE WORK.—Greenville, Miss.—The Board of Mississippi Levee Commissioners, Greenville, received bids, on Feb. 1, for levee enlargement work amounting to about 672,000 cu. yds. The contract has been awarded to ROACH & STANSELL, of Memphis, Tenn., as follows: 42,000 cu. yds., at 15 cts. per cu. yd.; 500,000 cu. yds., at 30.2 cts.; 130,000 cu. yds., at 21 cts. Total, $184,600. W. J. Shackilford is Ch. Engr.

DESIGNS, ETC., FOR MONUMENT.—Cincinnati, Ohio.—Compettitive designs, including models, for the memorial monument to be constructed at Fort Recovery, Mercer County, Ohio, will be received by Maj. John C. Oakes, Cincinnati, until noon, Aug. 1.

DITCHES.—Columbus, Ohio.—Bids will be received at the Court House, Columbus, until Feb. 18, for the construction of the Lavely and Becker ditches in Franklin County.

VACUUM-CLEANING SYSTEM.—Youngstown, Ohio.—Bids will be received until Mar. 6 by the Clerk of the Board of Education for furnishing and installing a vacuum-cleaning system in the South High School. Owsley, Boucherle & Owsley are Archs., Maloney Block, Youngstown.

RACE TRACK.—Indianapolis, Ind.—The Indiana Trotting Horse Breeders Association, recently incorporated, proposes to build a new park and race track near Indianapolis. Buildings, fencing and race track will be let to contract this spring. Sterling R. Holt, George J. Marott, Henry Lawrence and Charles Downing are Directors.

EQUIPMENT FOR TELEPHONE SYSTEM.—Poland, Ind.—The Poland Telephone Co., recently incorporated, is in the market for wire, equipment and switchboard for the installation of a telephone system. W. H. Huber is Pres.

DITCH.—Washington, Ind.—Surveys and plans are being made for the construction of a large ditch in Daviess County.

LIFE-SAVING STATION.—Eagle Harbor, Mich.—The following bids were received on Jan. 27 by the Superintendent of the Life-saving Service, Washington, D. C., for the construction of a life-saving station at Eagle Harbor, Mich.; August Tiedemann, Ludington, Mich., $16,432; P. J. Donohue, Laurium, Mich., $7,647; Frank E. Myers, Laurium, $7,828; Thomas Brown, Laurium, $3,300; L. F. Ursin, Laurium, $7,733; A. A. Johnson, Hancock, Mich., $10,110.

STEEL FREIGHTERS.—Ecorse, Mich.—The GREAT LAKES ENGINEERING CO., of Ecorse, has been awarded a contract by the Shenango Steamship & Transportation Co., of Pittsburg, Pa., William P. Snyder, Pres., for the construction of two large steel bulk freighters, to be built at the Ecorse yards. The two freighters will cost about $1,000,000. They will each be 617 ft. long, 64 ft. beam and 33 ft. deep, and will have a capacity of 12,000 tons of ore. Each steamer will have three Scotch boilers, 11.5 ft. long and 14.75 ft. in diameter. Each of the steamers will have marine type, quadruple engines; cylinders, 23, 33, 48, 69, with a 42-in. stroke. Antonio C. Pessano is Pres. Great Lake Engineering Co.

DOCK.—Marquette, Mich.—The Lake Superior & Ishpeming R. R. Co. will receive bids about Feb. 10 for the concrete and foundation work for the proposed dock to be erected here. Total cost, $1,200,000. The WISCONSIN BRIDGE & IRON CO., of Milwaukee, Wis., has received the contract for the steel work. Noted on Jan. 26.

contract has been awarded [illegible] JOHN ALBRECHT, Glencoe, Ill. There [illegible] be 8,872 ft. of ditch, 6 ft. deep and [illegible] ft. bottom width; 5,776 ft. of ditch, 6 [illegible] ins. deep and 13 ft. bottom; and 3,104 ft. [illegible] ditch, 6 ft. 8 ins. deep and 4 ft. bottom [illegible] side slopes, approximately 75,963 cu. yds. [illegible] yds. already done). Windes & Mar[illegible] Winnetka, Ill., are Engrs.

DITCH.—Fort Dodge, Iowa.—[illegible] will be received until Feb. 15 by the Bo[illegible] of County Supervisors at Fort Dodge, for [illegible]structing a ditch and drain in Drainage [illegible] District No. 69, Fulton and Johnson Town[illegible]. Estimated cost, $40,921. G. P. Sm[illegible] is Engr., Fort Dodge. J. L. Hanrahan is C[illegible]ty Audr.

DITCH.—Albert Lea, Minn.—[illegible] Brainerd, County Audr., will receiv[illegible] until 2 p. m., Feb. 23, for the con[illegible]tion of county ditch No. 23, approxima[illegible] 156,528 yds. of excavation. Estimated c[illegible] $15,010.

COAL SHED.—Duluth, Minn.—[illegible] Hanna Coal Dock Co. will soon award [illegible] contract for the construction of a new coal [illegible] here. A. E. Botsford is Supt.

DITCHES.—Fairmont, Minn.—[illegible] will be received until Feb. 21 by H. P. [illegible]wards, County Audr., for constructing Ju[illegible] Ditch No. 10, requiring the removal of [illegible] yds. of earth and furnishing and laying [illegible] ft. of from 6 to 24 in. tile. Estim[illegible] cost, $65,760; and for constructing Jud[illegible] Ditch No. 13, requiring 14,266 ft. of from [illegible] to 16 in. tile, estimated cost, $4,700.

DITCHES.—Hallock, Minn.—C. [illegible] Hemingson, County Audr., will receiv[illegible] until 11 a. m., Feb. 20, for the constr[illegible]on of judicial ditch No. 32, approximatin[illegible] 45,909 yds. of excavation; estimated to [illegible] $16,050; and until 1 p. m., Feb. 20, for [illegible] construction of judicial ditch No. 31, [illegible]proximating 197,204 yds. of excavation, [illegible]mated to cost $21,692.

(Continued on page 73.)

CONTRACT PRICES.

*BRIDGE.—Peoria, Ill.—Bids were received on Jan. 24 for constructing a bridge across the Illinois River at Bridge St., and for the removal of the old bridge, from: (A) MILWAUKEE BRIDGE CO., Milwaukee, Wis., (awarded contract); (B) Pennsylvania Steel Co., Steelton, Pa.; (C) Cullen Freistedt Co.; (D) Toledo Bridge & Contracting Co., Toledo, Ohio; (E) Midland Bridge Co.; (F) Kansas City Bridge Co., Kansas City, Mo.; (G) Joliet Bridge & Iron Co., Joliet, Ill. The item bids were:

BRIDGE, PEORIA, ILLINOIS.

	A	B	C	D	E	F	G
Removal of debris (lump sum)	$20,000.00	$21,000.00	$49,948.75	$10,000.00	$20,000.00	$43,000.00	$38,280.00
Removal old piers and bridges (lump sum)	7,400.00	11,700.00	8,000.00	4,300.00	20,000.00	10,500.00	10,780.00
1,830 cu. yds. concrete in bases	17.00	23.00	15.25	20.00	25.00	8.00	28.00
1,180 cu. yds. concrete in shafts and copings	7.50	9.20	8.10	10.00	10.00	8.00	8.00
285 lin. ft. timber piling	.40	1.00	1.15	.70	.80	.75	.60
475 cu. yds. concrete removed above water	2.50	9.20	10.90	9.00	6.00	9.00	8.00
240 cu. yds. new concrete in old piers	8.00	8.00	11.25	11.00	10.00	15.00	9.00
830 cu. yds. earth to be removed	.80	1.15	.90	1.50	2.00	1.25	1.50
Navigation fenders (lump sum)	885.00	1,120.00	1,171.67	1,000.00	1,250.00	700.00	900.00
100 cu. yds. new earth fill	.80	1.15	1.15	1.00	.50	1.25	1.00
19,000 lbs. reinforcing steel	.03	.05	.056	.03	.03	.04	.031
45,000 lbs. cast steel	.0596	.055	.062	.051	.08	.0725	.09
1,950,000 lbs. other metal	.0393	.045	.0384	.0388	.045	.04	.0485
2,010 sq. yds. pavement on spans	2.10	4.25	2.75	2.00	2.50	2.25	2.60
770 sq. yds. pavement on approaches	1.60	3.00	1.75	1.50	3.00	2.40	2.25
101 M. ft. B. M. creosoted timber	56.00	55.00	80.50	56.00	80.00	65.00	120.00
190 cu. yds. concrete in sidewalks	15.00	15.00	20.70	15.00	17.00	20.00	20.00
Electric lighting system, lump sum	1,200.00	1,500.00	3,795.00	750.00	1,500.00	2,000.00	1,900.00
Totals at schedule prices	$166,897	$205,826	$206,716	$164,441	$217,153	$187,727	$241,434
Lump sum bids	$166,897	$205,825	$206,716	$212,276	$217,153	$233,900	$248,000

DRAINAGE DITCH.—Greenville, Ohio.—Commissioners of Darke County, Greenville, have approved of the construction of a ditch to drain 85,000 acres.

FREIGHTER.—Lorain, Ohio.—The AMERICAN SHIPBUILDING CO. has been awarded a contract for the construction of a bulk freighter, to be 545 ft. over all, 525 ft. keel, 58 ft. beam and 31 ft. deep, to be built on the Isherwood system. Her engines will be triple-expansion, with cylinders 23½, 38 and 63 ins. in diameter, with stroke of 42 ins., supplied with steam from two Scotch boilers, 15 ft. in diametetr and 11½ ft. long. She will probably be built at the Lorain yard of the company.

CEMENT, LIMESTONE, ETC.—Chicago, Ill.—Bids will be received separately by the West Chicago Park Commissioners, at their office in Union Park, until 4 p. m., Feb. 14, for approximately 1,000 tons of asphaltic cement, 5,000 cu. yds. crushed limestone, 520 cu. yds. crushed granite, 1,600 cu. yds. bank sand, 1,600 cu. yds. torpedo sand, to be delivered at various places in the West Park System, in accordance with plans and specifications on file in the office of the said West Chicago Park Commissioners in Union Park.

DRAINAGE DITCH.—Libertyville, Ill.—Bids for the construction of the Seavey Slough Drainage District were received by the District Commissioners on Jan. 21. The

FILTRATION PLANT.—Grand Rapids, Mich.—Bids were received by the Board of Public Works on Jan. 19, for the construction of buildings, filters, and equipment according to the plans of Hering & Fuller, Consulting Engrs., 170 Broadway, New York, N. Y., as follows: (A) Engineer's estimate; (B) ROBERTS FILTER MANUFACTURING CO., Darby, Pa. (awarded contract); (C) American Water Softener Co., Philadelphia, Pa.; (D) Carpenter & Adams, Grand Rapids; (E) Fred. T. Ley & Co., Springfield, Mass.; (F) Pittsburg Filter Manufacturing Co., Pittsburg, Pa.; (G) New York Continental-Jewell Filtration Co., New York, N. Y.; (H) Norwood Engineering Co., Florence, Mass.

FILTRATION PLANT, GRAND RAPIDS, MICH.

	A	B	C	D	E	F	G	H
100 cu. yds. earth excavation	$0.75	$0.75	$0.60	$0.50	$1.50	$0.70	$0.50	$0.75
850 cu. yds. stone concrete	12.00	9.00	11.00	9.40	13.50	10.00	10.28	10.87
10 cu. yds. cinder concrete	10.00	9.00	10.50	9.40	11.00	6.50	10.00	10.00
1,100 sq. yds. surfacing concrete floors	.30	.40	.40	.33	.45	.32	.37	.44
70,000 lbs. steel reinforcement	.04	.025	.03	.03	.035	.0275	.03	.03
2,000 lbs. structural steel	.05	.04	.039	.04	.035	.045	.04	.04
3,000 lbs. iron castings	.04	.05	.0325	.04	.05	.05	.035	.035
10 cu. yds. brick masonry	15.00	13.50	27.00	16.40	15.00	17.00	17.00	15.00
100 sq. yds. cement walks	1.75	1.10	1.08	1.00	1.40	1.10	1.15	1.10
1 ton c.-i. pipe, bell and spigot	50.00	46.00	40.00	45.00	38.00	45.00	47.00	40.00
1 ton specials, bell and spigot	80.00	91.00	85.00	90.00	80.00	90.00	90.00	88.00
1 ton flange specials	100.00	143.00	150.00	145.00	120.00	145.00	145.00	150.00
Ventilating fan (lump sum)	150.00	180.00	134.69	140.00	120.00	200.00	195.00	185.00
Filter strainer system (lump sum)	11,000.00	13,032.00	8,900.00	14,850.00	11,400.00	14,850.00	14,905.00	15,465.00
Filter gravel (lump sum)	500.00	1,188.00	341.00	1,375.00	675.00	1,375.00	1,240.00	1,210.00
Filter sand (lump sum)	3,600.00	4,679.00	7,432.00	5,930.00	3,200.00	5,930.00	6,000.00	5,840.00
Piping and filter equipment (lump sum)	45,000.00	43,749.00	41,125.00	48,245.00	47,000.00	48,245.00	49,645.00	51,400.00
Chemical feed controllers (lump sum)	5,000.00	5,678.00	4,604.00	5,500.00	4,000.00	5,500.00	6,025.00	5,820.00
Buildings (lump sum)	56,770.00	54,000.00	58,700.00	52,796.00	61,800.00	58,000.00	57,010.00	56,921.00
Wash-water tower (lump sum)	8,000.00	7,568.00	8,471.00	8,323.00	8,700.00	8,000.00	8,180.00	9,268.00
Venturi meter (lump sum)	2,300.00	2,575.00	2,313.00	2,700.00	2,000.00	2,700.00	2,610.00	2,800.00
Lime, alum and hypochlorite agitating devices (lump sum)	4,000.00	3,390.00	2,295.00	4,100.00	2,400.00	4,100.00	4,000.00	3,850.00
Vacuum cleaner (lump sum)	1,200.00	800.00	1,286.00	654.00	1,150.00	1,175.00	1,150.00	1,290.00
Concrete mixers and motors (lump sum)	3,000.00	2,460.00	2,574.00	1,749.00	2,300.00	2,700.00	2,948.00	2,840.00
Freight elevator and motor (lump sum)	3,400.00	1,800.00	3,062.00	3,050.00	2,900.00	2,800.00	2,500.00	2,750.00
Bucket elevator, motor and spouting (lump sum)	2,000.00	2,100.00	3,477.00	2,117.00	1,700.00	2,200.00	2,750.00	2,800.00
Lime crusher and motor (lump sum)	1,000.00	1,139.00	1,181.00	1,013.00	1,100.00	2,200.00	1,250.00	1,210.00
Trolley system (lump sum)	1,100.00	950.00	1,286.00	790.00	1,250.00	1,525.00	1,420.00	1,400.00
Lime solution tanks, troughs & screens (lump sum)	1,300.00	1,786.00	1,640.00	2,300.00	2,400.00	2,250.00	2,500.00	2,000.00
Hypochlorite dissolving tank (lump sum)	200.00	158.00	163.00	200.00	150.00	200.00	260.00	270.00
Wooden baffles (lump sum)	1,200.00	1,390.00	1,455.00	1,200.00	2,700.00	2,000.00	2,200.00	2,390.00
Totals	$165,000	$159,382	$163,323	$168,373	$172,373	$176,662	$178,929	$182,431

MISCELLANEOUS CONTRACTS.

(Continued from page 72.)

CEMENT.—Minneapolis, Minn.—Contracts for 105,000 bbls. of Portland cement were awarded on Jan. 27 by the City Council to the HURON PORTLAND CEMENT CO., of Alpena, Mich., at $1.25 per bbl., net, f. o. b. The cement will be used for sewer work, water-works and paving.

CANAL.—St. Paul, Minn.—The Lake Superior and Mississippi Canal Commission has filed its report with the State Legislature, declaring the feasibility of a channel to connect the upper Mississippi River with the head of Lake Superior. The Commission requests an appropriation of $15,000 for a survey of the upper Mississippi River, from St. Paul to Sandy Lake; $5,000 for removal of sunken logs impeding navigation about Little Falls, and for the creation of a Lake Superior and upper Mississippi River transportation and improvement fund.

DITCH.—Warren, Minn.—A. G. Lundgren, County Audr., will receive bids until 2 p. m., Feb. 21, for the construction of judicial ditch No. 12, approximately 526,427 yds. of excavation, estimated to cost $52,642.

SAND.—Leavenworth, Kan.—Bids will be received until 10 a. m., Feb. 28, by R. V. Ladow, Supt. of Prisons, Dept. of Justice, Washington, D. C., for furnishing and delivering at the U. S. Penitentiary at Leavenworth 5,000 cu. yds. of best Kaw River sand.

WHARF, ETC. — Aransas Pass, Tex. — The Aransas Pass Channel & Dock Co., E. O. Burton, Pres., has awarded the contract to J. P. NELSON, San Antonio, Tex., for the construction of a wharf, warehouse, switches and apron on Harbor Island on channel front. The contract calls for warehouse, 200 × 600 ft.; 3,000 ft. of switch track running parallel to wharf and ware house. The slip will be dredged back to island 1,000 ft., and arrangements made to handle three large vessels at one time. At the end of switches an apron will be built to handle material. C. S. Corrigan is Ch. Engr.

LEVEES, FLOOD-GATES.—Brenham, Tex.—Bids will be received by the Commissioners of the Washington County Improvement District No. 1, until 2.30 p. m., Mar. 2, at the office of the County Judge, Court House, Brenham, for the construction of about ten miles of levees and the installation of floodgates in the Brazos Bottom, in Washington County. Specifications, profiles, etc., may be obtained from J. M. Howe, Improvement Engr., 722 First National Bank Bldg., Houston, Tex. Copies may also be seen at the office of Buchanan & Stone, Brenham, and at the residence of J. F. Buchanan, Comr., Chappel Hill, Tex. Bidders are to take bonds of the Washington County Improvement District No. 1 in payment. Bond issue, $37,000. J. D. McGregor is Secy.

CRUSHING PLANT.—Llano, Tex.—A granite crushing plant will be installed at the granite quarries near here by C. C. Baker and associates.

SUBWAY.—Tulsa, Okla.—The City Commission has approved plans and specifications prepared by the St. Louis & San Francisco R. R. Co., F. G. Jonah, Ch. Engr. of Construction, St. Louis, Mo., for a subway to be constructed under the tracks on Denver Ave., which will extend entirely across the right of way, about 200 ft. Estimated cost, $10,000.

*TUNNEL.—Bonanza, Colo.—Bids will be received until Mar. 15 by the Rawley Mining Co. for driving a tunnel at Bonanza, Saguache County, approximately 6,000 ft. long. Plans and specifications may be seen at the office of Dorsey & Hodges, Boston Bldg., Denver, Colo., or at the office of Simonds & Burns, Consult. Engrs., Liberty Tower Bldg., New York; also at the office of Engineering News, 220 Broadway, New York.

PIPE.—Spokane, Wash.—Bids will be received until Feb. 17 by John Gifford, City Pur. Agt., for furnishing 3,000 ft. of 8-in., 2,000 ft. of 10-in., and 1,300 ft. of 14-in. kalamein pipe.

TUNNEL.—Los Angeles, Cal. — Property owners and business men have petitioned the City Council for the construction of a tunnel under Second St., between Hill St. and Figueroa St. Beginning at Figueroa St. the tunnel would occupy the full width of Second St., with an open cut 150 ft., tunnel to consist of two separate archways, one for two tracks of street railway and the other for vehicles and pedestrians, with another open cut 185 ft. on the Hill St. side. The plans also call for the construction of an elevator to extend from the floor of the tunnel to the top of Bunker Hill Ave.

BREAKWATER. — Burke's Head, N. S.—The contract for the construction of the breakwater here has been awarded by the Department of Public Works, Ottawa, to A. W. GIRROIR & KINSMAN SWEET, of Antigonish, N. S., at $35,000.

WHARF.—St. Joseph de Letellier, Que.—The contract for the construction of the proposed wharf here has been let to NAP. WARREN, of Chicoutimi, Que., at $18,000.

DRY DOCK.—Amherstburg, Ont.—A private company is having plans prepared for the constructiton of a dry dock here which will be 600 ft. long. A. H. Clark, of Windsor, Ont., and D. H. Terry and Alfred Wood & Sons, of Amherstburg, it is reported, are interested.

WHARF.—Gravenhurst, Ont.—The contract for the construction of the wharf at Gravenhurst has been awarded by the Department of Public Works, Ottawa, Ont., to D. G. STEWART, of Ottawa, at $12,984.

TELEPHONE LINES.—Kenora, Ont.—The Central Canada Power Co. is seeking incorporation, with head office here, to build long-distance telephone lines to connect with Duluth, Minn., Winnipeg, Man., and other cities. Work will commence as soon as the charter has been obtained.

BROKEN STONE, BRICK, ETC.—Ottawa, Ont.—Bids will be received until 4 p. m., Feb. 14, by the city for broken stone, brick, stone curbing, cement, sand, asphalt, castings, etc. Newton J. Ker is City Engr.

CRUISERS, DESTROYERS.—Ottawa, Ont.—Bids for the construction of four Bristol cruisers and six destroyers for Canada's proposed navy will be received by the Naval Department, Ottawa, until April 1. Plans and specifications may be seen at the department. It is stipulated that all the vessels must be built in Canada.

CONDUITS.—Winnipeg, Man., Can.—Bids will be received by M. Peterson, Secy. Civic Bd. of Control, until 11 a. m., Feb. 22, for laying conduits in the business section. Estimated cost, $600,000.

TELEPHONE SYSTEM EXTENSION.—Winnipeg, Man.—The Manitoba Telephone Commission will spend approximately $2,000,000, it is reported, this year in extending and improving its telephone system. Estimates call for the expenditure of $500,000 on rural lines and a like amount for extending the system in Winnipeg. F. C. Patterson is Chn. Comn.

WHARF EXTENSIONS.—Prince Rupert, B. C.—The Davis Co. and Prince Rupert Marine & Ironworks Co. will build extensions to their wharves here in the spring.

PIPE.—North Vancouver, B. C.—Bids will be received by George S. Hanes, City Engr., until noon, Feb. 12, for the supply of the following standard c.-i. piping: 10,000 ft. of 4-in., weighing 20 lbs. per ft.; 5,000 ft. of 6-in., weighing 30 lbs. per ft.; 19,400 ft. of 10-in., weighing 45 lbs. per ft.; 9,750 ft. of 10-in., weighing 60 lbs. per ft.; 6,300 ft. of 10-in., weighing 75 lbs. per ft.; a total of about 1,135 tons.

LIST OF CONTRACTS PENDING.

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Noted in issue of
2-11 Oil tanks, Portsmouth, N. H. (S)	1-12
2-24*Earthwork, Belle Fourche, S. Dak. (S)	12-29

Light, Heat and Power Plants.

Bids close.	Noted in issue of
2-11 Elec. service connections, Fort Sam Houston, Tex	2- 2
2-14 Elect. equip, Atlanta, Ga	1-26
2-15 Elect. equip, Haverhill, Mass	1-26
2-15 Gas Lighting, Baltimore, Md	2- 9
2-16 Light and power, Leavenworth, Kan.	1-26
2-17*Underground conduits, Westfield, Mass	2- 9
2-23 Miscellaneous electrical equipment, Dalton, Ga	2- 9
2-23 Lighting plant, Wymore, Neb	2- 9
2-23 Fixtures, Washington, D. C	2- 2
3- 1 Gas plant, Monterey, Mex	1-26
3- 1 Engines, generators, Strathcona, Alta	2- 9
3- 8 Conduits and wiring, Brookhaven, Mass	2- 9
3- 8 Fixtures, Cleveland, Ohio	2- 2

Bridges.

Bids close.	Noted in issue of
2-13 Superstructures, Washington, C. H., Ohio	2- 2
2-13 Bridge, St. George de Beance, Que	2- 9
2-13 Superstructure, Celina, Ohio	2- 9
2-14 Repairing bridge, Modesto, Cal	2- 9
2-14 Bridge construction, Waseca, Minn	2- 9
2-14 Bridge, Saratoga Springs, N. Y	2- 9
2-14 Viaduct repairs, Troy, N. Y	2- 9
2-15 Bridge, Lawrenceville, Va	2- 2
2-16 Bridge, Conway, S.*C	2- 2
2-18 Span, Denver, Colo	2- 9
2-20 Culverts, Hallock, Minn	2- 9
2-23 Bridge work, Columbus, Ohio	2- 2
2-27 Bridge, Yankton, S. Dak	1-19
2-27 Bridge, Lorain, Ohio	2- 9
2-28 Bridge, Springfield, Ohio	1-26
3- 2*Bridge, Kingston, N. Y	2- 2
3- 6 Arches, etc., Los Angeles, Cal	2- 2

Buildings.

Bids close.	Noted in issue of
2- 9 Patrol house, St. Louis, Mo	2- 9
2-10 Bldg., Crookston, Minn	2- 2
2-10 School, Ainsworth, Neb	2- 2
2-10 School, Livingston, Wis	2- 2
2-10 Theater, Bridgeport, Conn	2- 9
2-11 Theater, Baltimore, Md	2- 2
2-11 Bldg., Indianapolis, Ind	2- 2
2-11 School, North Grove, Ind	2- 2
2-11 Bldg., Galveston, Tex	2- 2
2-14 School, Ashtabula, Ohio	2- 2
2-14 School, Lakewood, Ohio	2- 2
2-14 Post office, etc., Barre, Vt	1-19
2-14 Y. M. C. A. Bldg., Winnipeg, Man	2- 9
2-15 School house, Boston, Mass	2- 9
2-15 Erection of school, Youngstown, Ohio	2- 9
2-15 Post office, etc., Brazil, Ind	1-19
2-15 Bldg., Belleplaine, Minn	2- 2
2-15 High school, Aurora, Ill	2- 2
2-15 Building, Wagner, S. Dak	2- 2
2-15 Jail, Rushville, Neb	2- 2
2-16 Court-house, Onida, S. Dak	2- 2
2-18 Storehouse, Ft. H. G. Wright, N. Y	2- 2
2-18*Post office, North Yakima, Wash	1-19
2-18 Apartments, Calgary, Alta	2- 9
2-18 Bldg., Calgary, Alta	2- 9
2-18 Hotel, Oswego, N. Y	2- 9
2-20 Post office, etc., Big Stone Gap, Va.	1-19
2-20 Bldg., Grand Forks, N. Dak	2- 2
2-21 School, Freeport, Ill	2- 2
2-23 School, Emery, S. Dak	2- 2
2-23 Erection of bldg, etc., Murphysboro, Ill.	1-19
2-23 Federal Bldg., Roswell, N. Mex	2- 9
2-24 School, Indianapolis, Ind	2- 9
2-28 School, Carcross, Yukon	1- 5
2-28 Hospital, Fort Missoula, Mont	2- 9
3- 1 Church, Pendleton, Ore	2- 9
3- 1 School, Cleveland, Ohio	2- 9
3- 1 School, Glidden, Wis	2- 2
3- 3 School, Ashland, Ore	2- 9
3- 7*Hospital, New London, Conn	2- 9
3- 8 Post-office, Brookhaven, Mass	2- 2
4-15 Plans, Havana, Cuba	10-20

Water-Works.

Bids close.	Noted in issue of
2- 9 Reservoir, Elmira, N. Y	21 9
2-10 Meters, etc., New York	2- 2
2-10 Cast-iron pipe, etc., Minneapolis, Minn.	2- 2
2-11*Pumps and motors, Chicago, Ill	2- 2
2-13 Laying pipe, Pembroke, Ont	2- 2
2-13*Well, South River, N. J	1-19
2-13 Reservoir, St. Thomas, Ont	2- 9
2-14 C. I. pipe, Sandusky, Ohio	2- 9
2-14 Water system, Townsend, Mont	1-26
2-14 Water purification works, Toledo, Ohio	1-19
2-14 Water-works supplies, Ottawa, Ont	2- 2
2-14 Reservoir, Webb City, Mo	1-26
2-15 Pumps, etc., Roosevelt, Ariz	1-26
2-15 Water-works, Gainesville, Ga	2- 2
2-15 Pipe-line, New York	2- 9
2-16 Water-works, Dalton, Ga	2- 2
2-16*Enlarging reservoir, etc., Bozeman, Mont	1-26
2-17 Pumping station, North Bend, Neb.	1-26
2-17 Watermains, Nottingham, Ohio	2- 9
2-20 C. I. pipe, Fergus Falls, Minn	2- 9
2-20 Water supply, Mont Laurier, Que.	2- 9
2-20*Machinery, etc., Marshalltown, Iowa	2- 9
2-20 Water system, Madera, Cal	2- 2
2-20*Pump pits, Charleston, S. C	2- 9
2-21 Pumping engine, Coshocton, O	2- 2
2-21 Wood pipe, etc., Colville, Wash	2- 2
2-23 W.-Works materials, etc, Dalton, Ga	2- 9
2-23 Water plant, Wymore, Neb	2- 9
2-24*Earthwork, Belle Fourche, S. Dak	12-29
2-27 Water main, Euclid, Ohio	2- 9
2-28*Reservoir, etc., Ft. Terry, N. Y	2- 2
3- 1 Completing dam, etc., Green River, Utah	2- 2
3- 1 Water-works, Atlantic, Iowa	1- 5
3- 1 Water supply, Chaffee, Mo	2- 9
3- 3 Gate valves, etc., Victoria, B. C	2- 9
3- 6 Tank and Tower, Bridgewater S. Dak	2- 9
3- 6 Main, Sheridan, Wyo	2- 2
3-7*Filters, etc., Ogdensburg, N. Y	2- 9
4- 1 Water-works, West Telford, Pa	2- 2

Sewers.

Bids close.	Noted in issue of
2-10 Sewers, Minneapolis, Minn	2- 2
2-10 Sewers, Cleveland, Ohio	2- 9
2-11 Sewers, St. Paul, Minn	2- 2
2-13 Sewers, Richmond, Ind	2- 9
2-14 Sewers, St. Louis, Mo	2- 9
2-14*Sewers, Sigourney, Iowa	2- 2
2-14 Sewers, New York, N. Y	2- 2
2-15 Sewers, Wilson, N. C	2- 2
2-15 Sewers, Dell Rapids, S. Dak	2- 2
2-15 Sewers, San Francisco, Cal	2- 9
2-16 Sewers, New York, N. Y	2- 9
2-16 Culverts, Mobile, Ala	2- 2
2-17 Sewers, St. Louis, Mo	2- 9
2-17 Sewers, Cincinnati, Ohio	2- 9
2-20 Sewers, Huntington, W. Va	2- 2
2-21 Sewers, Mt. Vernon, Iowa	2- 2
2-21 Sewer, Clarinda, Iowa	2- 2
2-21 Sewer, Melrose, Minn	2- 9
2-21*Sewers, Clinton, Okla	2- 9
2-23 Sewer, Baltimore, Md	2- 9
2-23*Sewers, Paris, Ill	2- 2
2-24 Sewers, Hastings, N. Y	2- 2
2-28 Sewers, Cleveland, Ohio	2- 2
2-31 Sewers, Solvay, N. Y	2- 2
3- 3*Sewers, Watertown, N. Y	2- 9
3-16 Sewer system, Rector, Ark	2- 2

Streets and Roads.

Bids close.	Noted in issue of
2-10 Grading, Cleveland, Ohio	2- 2
2-10 Grading, etc., Wilkesbarre, Pa	2- 2
2-10 Grading, New Haven, Conn	2- 9
2-11 Road construction, Frankfort, Ind	2- 2
2-11 Paving, Norfolk, Va	2- 9
2-11 Grading, Cleveland, Ohio	1-26
2-13 Paving, etc., Oklahoma City, Okla	2- 9
2-13 Paving and curbing, Mason City, Iowa	2- 9
2-13 Paving, Erie, Pa	2- 2
2-13 Paving, etc., Columbiana, Ohio	2- 2
2-14 Gravel road, Menominee, Mich	2- 2
2-14 Paving, Crookston, Minn	2- 9
2-14 Grading, etc., Riverside, Cal	2- 9
2-14 Culverts, Columbia, S. C	2- 9
2-15 Sidewalks, etc., Sandusky, Ohio	2- 9
2-15 Grading, etc., Turtle Creek, Pa	2- 9
2-15 Paving, etc., Springfield, Ohio	2- 9
2-15 Road Work, Manning, Iowa	2- 9
2-15 Road work, Williamsburg, Iowa	2- 2
2-15 Paving, etc., Elizabeth, N. J	2- 2
2-15 Road construction, Cleveland, O	1-19
2-15 Paving, etc., New York, N. Y	2- 2
2-16 Paving, Mobile, Ala	1-26
2-16 Paving, Youngstown, Ohio	2- 9
2-16 Grading, etc., Cincinnati, Ohio	2- 9
2-16 Paving, etc., New York, N. Y	2- 9
2-17 Paving, Westfield, Mass	2- 2
2-18 Grading, etc., Franklin, Ind	2- 2
2-20 Paving, Huntington, W. Va	2- 2
2-20 Paving, Defiance, Ohio	2- 2
2-20 Pavements, Ludington, Mich	2- 2
2-20 Roads, etc., Boston, Mass	-26
2-20*Road construction, Mineola, N. Y	2- 2
2-20 Road Work, Fort Madison, Ia	2- 9
2-20 Macadamizing, Adna, Wash	2- 9
2-20 Grading, etc., Bowling Green, O	2- 9
2-20 Paving, etc., Corning, Iowa	2- 9
2-20 Regulating, etc., New York, N. Y	2- 9
2-21 Street improvements, St. Louis, Mo	2- 9
2-21 Pavements, Columbia, Mo	2- 9
2-23 Grading, Columbus, Ohio	2- 9
2-23 Paving, Portland, Ore	1-19
2-24 Road work, Cincinnati, Ohio	2- 2
2-24 Road improvement, Cincinnati, Ohio	2- 9
2-25 Grading, Lisbon, Ohio	2- 9
2-27 Highways, Albany, N. Y	2- 9
2-27 Paving, etc., Lakewood, Ohio	2- 9
2-27 Paving, Atlantic City, N. J	2- 2
2-28 Paving, Newbern, N. C	2- 9
2-28 Walks, etc., Fort Niagara, N. Y	2- 9
3- 1 Highway impvts., Portland, Ind	2- 2
3- 1*Macadam road, Madison Barracks, N. Y	2- 2
3- 1*Asphalt, Winnipeg, Man	1-26
3- 9 Road construction, Jackson, Miss	2- 9
3-13 Grading, Worthington, Minn	2- 2

Miscellaneous.

Bids close.	Noted in issue of
2-10 Cold storage plant, Crisfield, Md	1-26
2-10 Sewer brick, etc., Minneapolis, Minn	2- 2
2-10 Furnace, etc., Watertown, Wis	2- 2
2-10 Fire-alarm boxes, Spokane, Wash	2- 2
2-11 Caisson, Hawaii (U. S. Poss.)	2- 2
2-11 Ditches, Greenfield, Ind	2- 2
2-11 Immigrant station, Galveston, Tex	2- 2
2-11 Oil tanks, Portsmouth, N. H	1-12
2-11*Dredging, Galveston, Tex	1-12
2-12 Pipe, North Vancouver, B. C	2- 9
2-13 Collection of garbage (Garbage), Waterbury, Conn	2- 9
2-13 Wharf, Michipicoten, Ont	1-26
2-13 Gravel, Boston, Mass	2- 2
2-13 Auto chassis, Redondo, Cal	2- 2
2-14 Hook and ladder truck, etc., Los Angeles, Cal	2- 2
2-14*Dredging and rock removal, New York	1-12
2-14 Brass, copper, etc., Washington, D. C	2- 9
2-14 Cement, limestone, Chicago, Ill	2- 9
2-14 Broken stone, brick, etc, Ottawa, Ont	2- 9
2-14 Channel excavation, Buffalo, N. Y	2- 9
2-15 Brick, vitrified block, Baltimore, Md	2- 9
2-15 Ditch, Fort Dodge, Iowa	2- 9
2-15 Steel steamer, Ottawa, Ont	12-29
2-15 Boiler, Ottawa, Ont	1-19
2-15 Fire engine and hose wagon, Washington, D. C	1-19
2-15 Boiler, Ottawa, Ont	2- 2
2-15 Woven-wire fence, N. Chicago, Ill	2- 2
2-15 Excavating channel Newark, O	2- 2
2-15 Binder stone, etc., New York	2- 2
2-16 Railway, Spain (Foreign)	2- 2
2-16 Telephone system, Delaware, O	2- 2
2-16 Steel bars, copper, Panama (U. S. Poss.)	2- 9
2-17 Pipe, Spokane, Wash	2- 9
2-17 Reinforcement material, Panama, (U. S. Poss.)	2- 2
2-17 Crushed stone, Boston, Mass	2- 2
2-18 Steel tug, Vancouver, B. C	2- 2
2-18*Storehouse, Fort H. G. Wright, N. Y.	1-26
2-18 Ditches, Columbus, Ohio	2- 9
2-20 Patrol vessel, Egypt, (Foreign)	2- 9
2-20 Ditches, Hallock, Minn	2- 9
2-20 Lock and dam, Cincinnati, Ohio	1-26
2-20 Wh'f extension, St. Fauville, Que	2- 2
2-20 Fire wagon, Helena, Mont	2- 2
2-20 Broken stone, New York, N. Y	2- 9
2-21*Structural steel fabrication, New Orleans, La.	1-26
2-21 Ditches, Fairmont, Minn	2- 9
2-21 Ditch, Warren, Minn	2- 9
2-22 Conduits, Winnipeg, Man	2- 9
2-22 Railway, Italy (Foreign)	2- 9
2-22 Steel tramway plates, Australia (Foreign)	12- 8
2-23 Telephone material, Brazil (Foreign)	2- 2
2-23 Ditch, Albert Lea, Minn	2- 9
2-24*Fire escapes, White Plains, N. Y	2- 9
2-24 Lock gate recess covers, Panama, (U. S. Poss.)	2- 2
2-25 Machinery for gate valves, etc., Panama (U. S. Poss.)	1- 5
2-25 Ordnance storehouse, Fort Constitution, N. H.	2- 9
2-28 Sand, Leavenworth, Kan	2- 9
2-28 Elec. pumping machinery, Australia (Foreign)	12-29
2-28*Locktender's dwelling, Cincinnati, Ohio	2- 2
3- 1 Asphalt, Winnipeg, Man	2- 2
3- 1*Breakwater, etc., Milwaukee, Wis	2- 2
3- 1 Bath house, Hot Springs, Ark	1-12
3- 1 Ventilating apparatus, So. Africa (Foreign)	1-19
3- 2 Levees, Floodgates, Brenham, Tex	2- 9
3- 6 Steel dredger chains, Argentine Republic (Foreign)	2- 9
3- 6 Vacuum cleaning system, Youngstown, Ohio	2- 9
3- 7 Ice piers, Cincinnati, Ohio	2- 2
3-14 Wireless telegraphy installation, Australia (Foreign)	1-19
3-14 Elec. light plant, Roumania (Foreign)	2- 9
3-14 Torpedo boats, Washington, D. C.	2- 9
3-15*Tunnel, Bonanza, Colo	2- 9
3-15 Mooring stones, Portland, Me	2- 9
3-16 Ditch, etc., Rector, Ark	1-26
3-24*Rock railway material, Panama, (U. S. Poss.)	1-26
3-30 Dams, etc., Panama (U. S. Poss)	1-19
4- 1 Bridge, Spain (Foreign)	2- 2
4- 1 Cruisers, destroyers, Ottawa, Ont	2- 9
8- 1 Designs, etc., for monument, Cincinnati, Ohio	2- 9
4-20 Hospital, etc., (plans and designs) Argentine Republic (Foreign)	1-12

Examinations.

Examination date.	Noted in issue of
2-11 Assistant civil engineer, Albany, N. Y.	1-26
2-11 Accident Inspector, Albany, N. Y.	1-26
2-11 Leveler, Albany, N. Y	1-26
2-11 Chief Inspector of Gas, Albany, N. Y.	1-26
2-23 Editorial Clerk, Wash., D. C	2- 9
2-28 Aid in Anthropology, Washington, D. C.	1-[illegible]
3- 8 Civil Engineer, Wash., D. C	2- 9

U. S. POSSESSIONS.

STEEL BARS, COPPER.—Panama.—Bids will be received until Feb. 16 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., for 7,100 pieces of steel reinforcement bars; and 70,000 lbs. of ingot copper.

ELECTRIC CARS.—Philippine Islands.—The only bid received by the Depot Quartermaster, New York, for furnishing and delivering electric cars for the Corrigidor Island R. R. has been rejected. The bid was that of J. G. Brill & Co., of Philadelphia, Pa.

FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ———, ———. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes.

If, in the meantime, he should have gone out of office, the matter may wholly escape attention.

PATROL VESSEL.—Egypt.—Bids will be received until noon, Feb. 20, by the Director-General, Coast Guard Administration, Cairo, for a motor-driven patrol vessel.

ELECTRIC LIGHTING PLANT.—Roumania.—Bids will be received until Mar. 14 by Monsieur le Maire, Conseil Municipal, Tecuci, for installing an electric lighting plant for the town of Tecuci.

STEEL DREDGER CHAINS.—Argentine Republic.—Bids will be received until Mar. 6 by the Direccion General de Contabilidad, Buenos Aires, for supplying a quantity of steel chains for dredgers.

ELECTRIC RAILWAY.—Spain.—The Compania General de Tranvias de Valencia has been granted a concession for the construction and maintenance of an electric railway from Cotarroja to Silla (Valencia).

TELEGRAPH APPARATUS, ETC.—Argentine Republic.—The Direccion General de Correos y Telegrafos has been authorized to erect 13 telegraph lines in various parts of the Republic and to lay a cable, consisting of three conductors, to Montevideo. In connection with the above work, the Direccion is empowered to purchase, through the Argentine Legation in London, England, cable material, telegraph apparatus, insulators and galvanized wire.

RAILWAY.—Italy.—Bids will be received until Feb. 22 by the Direzione Generale delle Ferrovie Dello Stato, Rome, for the construction in Sicily of (a) two sections of line from Palma to Torre di Gaffe, and from Camastra to Palma, both forming part of the Naro-Licata Railway; length about 13 miles; (b) a section of line, about five miles long, from Alessandria to Cianciana, forming part of the Lercara-Bivona-Cianciana-Bivio Greci Railway.

EXAMINATIONS.

EDITORIAL CLERK.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Feb. 23-24., to secure eligibles from which to make certification to fill a vacancy in the Bureau of Manufactures, Department of Commerce and Labor, at $1,600 a year, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill such vacancy by reinstatement, transfer, or promotion. The examination will consist of the subjects mentioned below, weighted as indicated: Editing, 20 points; statistics, 15 points; proof reading, 15 points; economics and general geography, 15 points; thesis, 15 points; education, training and experience, 20 points. Applicants must have reached their 20th birthday. Examinaton form 1312.

CIVIL ENGINEER.—Washington, D. C.—The U. S. Civil Service Commission invites attention to the examination scheduled to be held on Mar. 8-9, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Civil Engineer in the Philippine Service, unless it shall be decided in the interest of the service to fill such vacancies by reinstatement, transfer, or promotion. The Director of Civil Service at Manila states that not only recent graduates, but also engineers with experience, are needed, and that the entrance salary ranges from $1,400 to $2,000 a year, according to experience. The examination will consist of the subjects mentioned below, weighted as indicated: Pure and applied mathematics, 20 points; use and construction of instruments and surveying, 30 points; design and construction, 25 points; training and experience, 25 points. Applicants must have reached their 18th, but not their 40th birthday. Examination form B. I. A. 2.

INDUSTRIAL NOTES.

MR. P. R. PARKER, formerly engineer with the San Francisco office of the Bucyrus Co., is now in charge of the Seattle office of the Yuba Construction Co., Alaska Bldg., Seattle, Wash.

PUBLICLY ADVERTISING contracts for private work is not, in itself, a novelty, but the Rawley Mining Co. recently took that course to secure bids for a 6,000-ft. tunnel, which is rather unusual and indicates a feeling of confidence in both the engineers and the contractors.

THE AMERICAN SEWER PIPE CO., of Akron, Ohio, sent out, on Jan. 28, two unusually large shipments of sewer pipe. The pipe was carried by two special trains of 40 cars each, one to the extreme Northwest and the other to the Southwest. Mr. D. S. Hoover is the Eastern Sales Manager of the company.

MR. JAMES A. GREEN, of Chicago, has opened a branch office at 509 Overland Bldg., Boise, Idaho, for the purpose of carrying on general irrigation and hydraulic engineering and construction. The Boise office is in charge of Mr. W. F. Day, Assoc. Am. Soc. C. E., who has had extensive experience in irrigation work.

MR. C. W. WHITNEY has resigned his position as contract manager of the Ransome Concrete Co., San Francisco, Cal., to take the position as General Purchasing Agent of what are known as the "Hammon Properties," consisting principally of The Yuba Construction Co., Natomas Consolidated of California, Boston Machine Shop Co., and Hammon Engineering Co., who have their main offices in the Alaska Commercial Bldg., San Francisco.

THE NATIONAL BUILDERS' SUPPLY ASSOCIATION will hold its annual meeting at the Annex Hotel, Chicago, on Feb. 21 and 22. The subjects to be considered relate to business and commercial affairs, rather than to technical matters; but there will be a semitechnical discussion on "Building Brick as a Factor in National Conservation." The President is Mr. Charles Warner, Wilmington, Del.; Secretary, Mr. James W. Wardrop, 605 Commercial Bldg., Pittsburg, Pa.

THE WESTINGHOUSE ELECTRIC & MANUFACTURING CO. has sold to the Isthmian Canal Commission two 75-KW. motor-generator sets, with a switchboard for the control of each. One of these motor-generator sets will be located in the substation near the site of the Gatun Locks, and the other on the Pacific side, near the Pedro Miguel Locks. The apparatus will be used in connection with the construction of the lock gates. The outfits will be installed at Gatun and Pedro Miguel, and will operate on 25-cycle, 2,300-volt energy, transmitted from the power stations at Gatun and Miraflores. The motor generators will convert this alternating current to direct current at 230 volts, for use on the various small tools used in the gate construction.

MR. R. W. GARDNER, manager of the Howard Iron Works, Buffalo, N. Y., since 1905, has been elected vice-president of the Otis Elevator Co., and has taken up his residence in Chicago. The new officers of the Howard Iron Works are: Alvan H. Alberger, Pres.; Edward B. Holmes, Vice-Pres.; George H. Gardner, Secy. and Treas.

The Alberger Gas Engine Company, recently incorporated with a capital stock of $221,000, has acquired substantially all the capital stock of the Howard Iron Works, and has also acquired the gas-engine business which has been successfully conducted in this city by the A. H. Alberger Co. The Alberger gas engines are manufactured in sizes from 15 to 500 HP., and are well known throughout the country and abroad. They will, as heretofore, be manufactured at the plant of the Howard Iron Works, and it is planned by the new corporation to increase largely the manufacture and sale of the engines. The officers of the Alberger Gas Engine Co. are: Alvan H. Alberger, Pres.; Edward B. Holmes, Vice-Pres.; Harvey L. Brown, Secy. and Treas.

THE YUBA CONSTRUCTION CO., Marysville, Cal., the largest gold dredge designers and builders in the West, has recently entered into an agreement with the Bucyrus Co., South Milwaukee, Wis., by which the former takes over the exclusive agency for Bucyrus gold dredge machinery for the territory of Alaska and British Columbia. This arrangement enables the Yuba Construction Co. to give special attention to the Alaskan dredging business, and, as a further facility for handling that business, it has opened an office in Seattle, in the Alaska Building, which will be maintained permanently, in addition to the San Francisco office. The Yuba Construction Co. has also recently acquired the business and equipment of the Western Engineering & Construction Co., San Francisco, Cal. The latter is one of the oldest firms engaged in gold dredge construction. The company is now building three 15-cu. ft. dredges in California, a 13½-cu.-ft. and a 9-cu.-ft. dredge in Idaho, and is installing a complete hydro-electric plant and a 8½-cu.-ft. dredge with steel hull in Colombia, South America.

MESSRS. CAMMELL LAIRD & CO., Ltd., one of the three greatest steelworkers and shipbuilders in Great Britain, who have just been awarded a contract of $10,000,000 by the British government for the construction of one of the new Dreadnaughts—they are also building five other warships—have formed an American company to handle their products in this country. This new American corporation is known as Cammell Laird & Co., of New York, and its main office and warehouse will be in the 4-story building just completed at No. 34 Cliff St., New York. The company will occupy the entire building, and will carry a larger stock than ever of English tool and high-speed steel. It will be one of the most modern and best equipped steel warehouses in the United States.

Cammell Laird & Co. were among the first experimenters in and developers of high-speed tool steel, and special attention to this class of the business will be given by their American company. Among their other great specialties are nickel and chrome nickel steel for automobile parts, heavy forgings for ships, rolling mills, sugar mills, etc.

One of the managers of Cammell Laird & Co., of New York, is Lionel Samuel, who has been the General Agent of the Sheffield concern and established its offices here some years ago. Under his energetic direction the business has so outgrown its old quarters at No. 25 Cliff St. that the organization of a new company and the quadrupling of warehouse and office facilities became necessary. Mr. Samuel is well known in New York, as well as in Mexico and Central and South American countries, with many of whose governments he has had large business relations. He is the Secretary, Manager and a Director in the new company. The President is Leonard Munn, of Sheffield, England, the Treasurer is Alexander Muir, who was the Canadian manager of the English company.

The new corporation occupied its new building Feb. 1. It represents not only Cammell Laird & Co., Ltd., of Sheffield, but all its allied interests, viz.: The Cyclops Steel & Iron Works, of Sheffield; the Yorkshire Steel & Iron Works, the Grimesthorpe Ordnance Steel Tyre & Spring Works, and the Shipbuilding Works at Birkenhead.

LITIGATION OVER PATENTS ON BITULITHIC PAVING.—The United States Circuit Court for the Southern District of Indiana has just rendered a decision on an application in the case of the Warren Brothers Co. against the Marion County Construction Co., in the city of Indianapolis. The plaintiffs applied for a temporary injunction, alleging infringement of their patent on bitulithic paving. The defendants showed exhibits of paving laid in Washington, D. C., and at the intersection of Clark and Monroe Sts., Chicago, and elsewhere, as proof that the patents were invalid for want of novelty. The plaintiffs showed other exhibits as evidence that the alleged anticipations were different from the pavement covered by the Warren patent. The court declined to grant the temporary injunction, and the following are excerpts from its decision:

I think it is too plain for argument or discussion or to permit the question of invention to come into it, that if you want to get a solid pavement you do not want too much of the fluxing material; you want to get as much of the solid material as you can, and enough of the fluxing material for binding purposes to hold it together. Now, that being the case, it seems as plain to me as hitting a nail on the head that you can get the best mixture by mixing the different sizes, the largest first, then the smaller, and so on down to dust, and that a man should have thought of that seems so plain to me that I do not understand how anyone ever concluded that there was invention in it. * * * When a suit is brought of this kind, where the patent has been in litigation in various parts of the country, and where there is still much question about it; where, if an injunction is granted now, it may be by the court itself set aside on final hearing; where there is no reason shown why in the ordinary processes of the court there cannot be a speedy determination of this on its merits, and when determined, against defendant or defendants who are amply able to respond, it seems to me there is very little ground to ask the court upon a partial hearing to issue an execution in advance of judgment.

There are too many preliminary injunctions granted. * * * Notwithstanding the history of this litigation, I have grave doubts myself as to whether there is any invention in this patent. Passing beyond that, I think it is open to debate, at least, as to whether or not this patent has not been anticipated in two or three instances from thirty to fifty years ago.

CONSUL LESTER MAYNARD, Vladivostok, transmits the information that the Russian government contemplates the improvement of the existing Siberian Railway and the construction of duplicate approaches both in European Russia and the Far East. When these works are completed, in 1915, the imperial treasury will have expended on the Siberian Railway over $1,000,000,000, which includes both cost of construction and loss on exploitation. In exchange for this, Russia will have a complete double-track system from the Urals to the Pacific, with double approaches, of a total length of 6,844 miles.

During 1910 the Ministry of Communications introduced into the Duma three bills providing for parts of this vast work. The first is to double the Baikal-Kultchuk section of the Circumbaikal Railway, the second is connected with the eastern part of the new Amur Railway, and the third is for double-tracking the existing Transbaikal Railway. The most important work, strategically, is the Amur Railway, which will supply Russia with communication with the Far East, running through Russian territory alone, as against the existing Chinese Eastern line. The new Amur line will be 1,344 miles long, and, as officially estimated, will cost $121,050,000; but, including rolling stock, guarding during construction, and the usual percentage of estimated expenditure, the cost is put at $149,244,000. With the completion of this work, which has been two years in hand, Russia will for the first time have railway communication with the Far East lying entirely in native territory.

The second great work under way is connecting St. Petersburg and the European Northern Railway system with the main Siberian line, the chief approach to which has hitherto been through Moscow and central Russia. The total cost of this new approach and incidental improvements will be $43,243,000.

Doubling and improving the existing track of the Siberian Railway is the next work. Calculated on the basis of past outlays, the Russian engineer, Mikhailovsky, puts the cost of reconstructing the existing Siberian line at $97,966,000. This makes a total cost of new works undertaken during the past three years of $290,453,000.

Engineering defects in the line will remain in steep gradients in the Transbaikal Railway which require pusher service, a large number of short curves, and wooden bridges over the narrow rivers, which are constantly destroyed by fire. The correction of these defects will bring the total to $302,210,000.

The statistical department of the Ministry of Communications puts the construction outlay up to 1907 on the Siberian and Manchurian railways at $422,412,000. The losses on exploitation during the 14 years which have elapsed since 1896, when the western section of the Siberian line was opened, are given at $211,693,000. The exploitation losses for the six years, which will elapse before the present schemes are finished will amount to about $60,831,000. This makes the total cost of the completed Siberian Railway $997,146,000, or about $146,827 per mile.

TRADE PUBLICATIONS.

DRAG BUCKET EXCAVATORS.—Monighan Machine Co., 2016-2030 Carroll Ave., Chicago, Ill. Stiff paper; 8½ × 12½ ins.; pp. 32; illustrated.

While the drag bucket excavator has been in use in heavy excavation work at least since the starting of the Chicago Drainage Canal, some 15 years ago, it is only quite recently that its use has become so widespread and the developments in the type so marked. The particular machine described in this catalog is operated from a long boom extending out from a set of tracks on which rest the engine and controlling devices.

CONCRETE MIXER.—Milwaukee Concrete Mixer & Machinery Co., Milwaukee, Wis. Paper; 6 × 9 ins.; pp. 23; illustrated.

The Milwaukee mixer is a batch mixer, approximately spheroidal in shape, with interior blades or buckets which pass through the material, stirring and grinding the aggregates, and pick up the concrete from the bottom of the drum, thus giving a uniform mixture. The claim is made that there is nothing marvellous about the Milwaukee, other than increased simplicity of construction, greater durability and the latest improved labor-saving devices for handling the material."

For other Proposal Advertisements see pages 51, 52, 53, 54, 55 of Advertisements and Construction News page 74.

PUMP PITS, ETC.

BOARD OF SEWER COMMISSIONERS.
Charleston, S. C., Feb. 1st, 1911.

Sealed proposals in duplicate will be received by the undersigned until 12 M., February 20th, 1911, for the construction of Pump Pits and appurtenances for the Sewerage System, Charleston, S. C. Set of plans and specifications furnished upon deposit of $10.00, which will be refunded upon return of set in good condition.

The right is reserved to reject any or all bids.

J. H. DINGLE,
City Engineer.

Situations Wanted

ASSISTANT ENGINEERS.—The Commissioners of Sewerage of Louisville, Ky., has nearly completed the construction of its $4,000,000 sewer system, so that it has become necesary to reduce its force of engineers. The Chief Engineer would be glad to recommend for employment as assistant engineers of all grades on sewer construction men who have left, or soon will leave, the employ of the Commission on account of the approaching completion of the work. J. B. F. BREED, Chief Engineer, Louisville, Ky. 6-1t & 8-1t

Situations Open

WANTED—Draftsman, experienced in designing and detailing standpipes, water towers and plate steel construction. Address TIPPETT & WOOD, Phillipsburg, N. J. 6-1t

COLLEGE GRADUATE with about two years' experience in designing and detailing structural steel work, can get steady position in New York City, with an interest in business later, if satisfactory. Must be a quick, hard-working and refined American. Only first-class applications with references in regard to character as well as to ability, will be considered. Address "P. A. 6," Engineering News, New York. 6-3t

Miscellaneous Wants

WANTED.—Superintendent of construction of railway work with $2,500. Can have interest in big contract netting him about ten thousand dollars. Give experience, age, references. Address "T. B. 6," Engineering News, 1636 Monadnock Block, Chicago, Ill. 6-1t

FOR SALE

FOR SALE
Two 22 H. P. Traction Engines.
One 15 Ton, 18 foot Freight Car.
Built by Buffalo Pitts Co., 1910.
All in perfect condition. Used for a short time.
Address:
C. P. BOWER CONSTRUCTION CO.
Bullentin Building, Phila., Pa. 6-4t

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